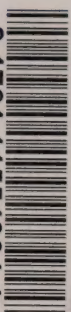


3 1761 11554964 4









Digitized by the Internet Archive  
in 2022 with funding from  
University of Toronto

<https://archive.org/details/31761115549644>





CAI EP 321

Pacific Marine Science Report 76-20

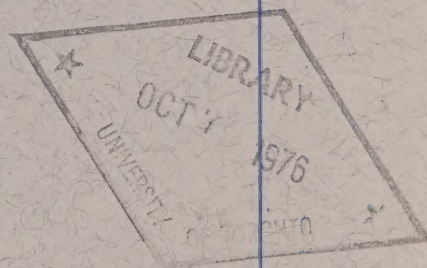
-76820

4

Government  
Publications

**OCEANOGRAPHIC DATA REPORT  
D' IBERVILLE FIORD, GREELY FIORD, EUREKA SOUND  
ELLESMERE ISLAND, N.W.T.  
March 1976**

by  
**Frozen Sea Research Group**



**INSTITUTE OF OCEAN SCIENCES, PATRICIA BAY  
Victoria, B.C.**



For additional copies or further information, please write to:

Environment Canada  
Institute of Ocean Sciences, Patricia Bay  
512 - 1230 Government Street  
Victoria, B.C.  
V8W 1Y4



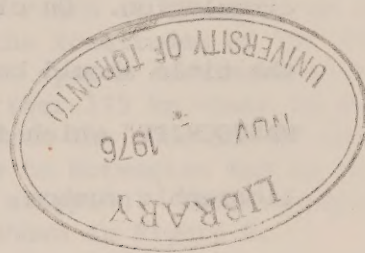
CAI EP 321

-76R20

Pacific Marine Science Report 76-20

Government  
Publications

OCEANOGRAPHIC DATA REPORT  
D'IBERVILLE FIORD, GREELY FIORD, EUREKA SOUND  
ELLESMERE ISLAND, N.W.T.  
MARCH 1976



by

Frozen Sea Research Group

Institute of Ocean Sciences, Patricia Bay  
Victoria, B.C.

September 1976

This is a manuscript which has received only limited circulation. On citing this report in a bibliography, the title should be followed by the words "UNPUBLISHED MANUSCRIPT" which is in accordance with accepted bibliographic custom



## INTRODUCTION

This is the fourth oceanographic data report listing information obtained from d'Iberville Fiord, Ellesmere Island, N.W.T. The first report (F.S.R.G., 1973) covers the period March to April, 1973; the second report (F.S.R.G., 1975) covers the period March to April, 1974, and August, 1974; the third report (F.S.R.G., 1976) covers the period March to April 1975. In addition to d'Iberville Fiord, data are presented in this report from Greely Fiord and the northern end of Eureka Sound. All data were obtained during March, 1976.

The physical oceanography of the area has been reported on by Ford and Hattersley-Smith (1965), Hattersley-Smith and Serson (1966), Lake and Walker (1973), Herlinveaux (1974) and Lake and Walker (1976).

D'Iberville Fiord is located near the eastern end of Greely Fiord at 80° 30' N, 79° 00' W and is 35 km long. Greely Fiord is situated on an east-west line along the latitude 80° 30' N between the longitudes of 79° 30' W and 86° 30' W, a distance of 140 km. The main fiord system continues in a north westerly direction along Nansen Sound for a further 175 km where it meets the Arctic Ocean. Eureka Sound extends southward from the junction of Greely Fiord and Nansen Sound and connects this fiord system to Norwegian Bay in the south and is the sole route into the area for marine shipping. Those geographic areas covered by the oceanographic survey are shown in Figure 1.

A longitudinal section of the Greely Fiord system, including d'Iberville Fiord and the northern portion of Eureka Sound is shown on Figure 2. A sill which obtains a maximum depth of 200 m lies across the mouth of d'Iberville Fiord isolating the deep water within. The maximum depth inside the fiord is about 560 m. Greely Fiord is a deep fiord with depths near 700 meters along all but the eastern end of the fiord. While large portions of the fiord remain uncharted the maximum depth found is 805 m. Greely Fiord contains no sills but the water below 450 m is isolated by a sill at the north end of Nansen Sound. Nansen Sound has depths in excess of 900 m. The north entrance to Eureka Sound has a sill with a maximum depth near 250 m after which it deepens to 650 m. Further south the sound becomes shallower until it reaches its shallowest point of 100 m about midway down the sound.

The only tide water glacier in the survey area occurs at the head of d'Iberville Fiord. The ice shelf and icebergs associated with this glacier have a marked effect on the temperature structure of the water within the fiord.

During the period September to July the sea is completely covered with sea ice which remains landfast until shore leads develop in June. The sea ice cover normally consists of extensive young (annual) sea ice with patches of rafted and hummocked ice. Photographic coverage obtained from Landsat 1 and Landsat 2 satellites showed the entire area, with the exception of the north end of Nansen Sound, to be entirely free of ice. The ice cleared by the first week in August and was not evident again until September 8 when a skim of sea ice could be seen in d'Iberville Fiord. This initial ice cover became general throughout the entire area by September 12. The sea ice disappeared again by September 17 and did not appear widespread again until about September 26 after which time no further satellite coverage of this area was received. It was evident during the field work in March 1976 that the ice in d'Iberville Fiord had broken up and rafted heavily when the ice was 4-5 cm thick. This may have



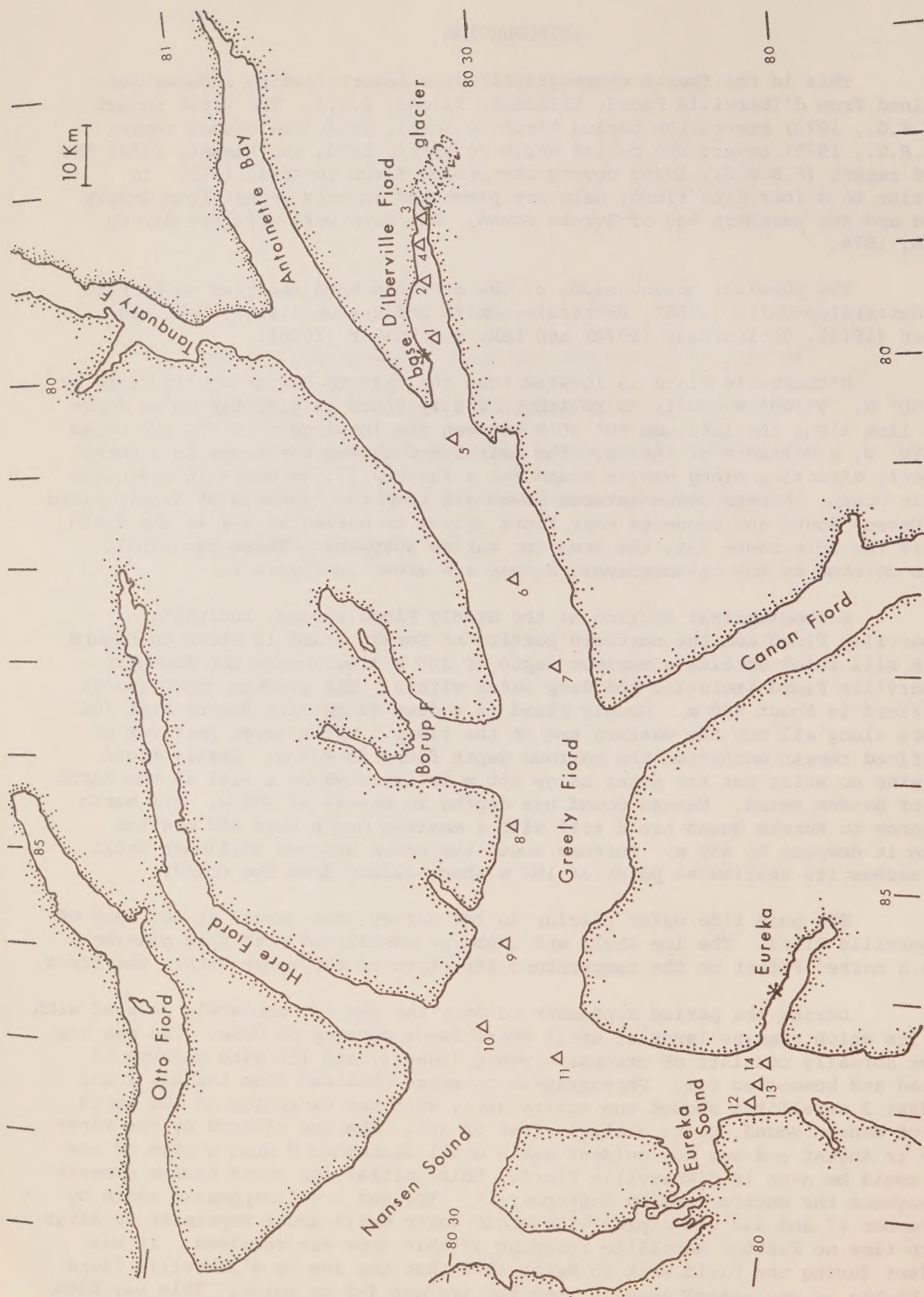




TABLE 1

Sites and Corresponding Experiment Numbersd'Iberville Fiord

Site 1	Exper. No. 2010 to 2014
--------	-------------------------

2	2015, 2016
---	------------

3	2017, 2018
---	------------

4	2019, 2020
---	------------

Greely Fiord

5	2021, 2022
---	------------

6	2023
---	------

7	2024
---	------

8	2025
---	------

9	2026, 2027
---	------------

10	2028
----	------

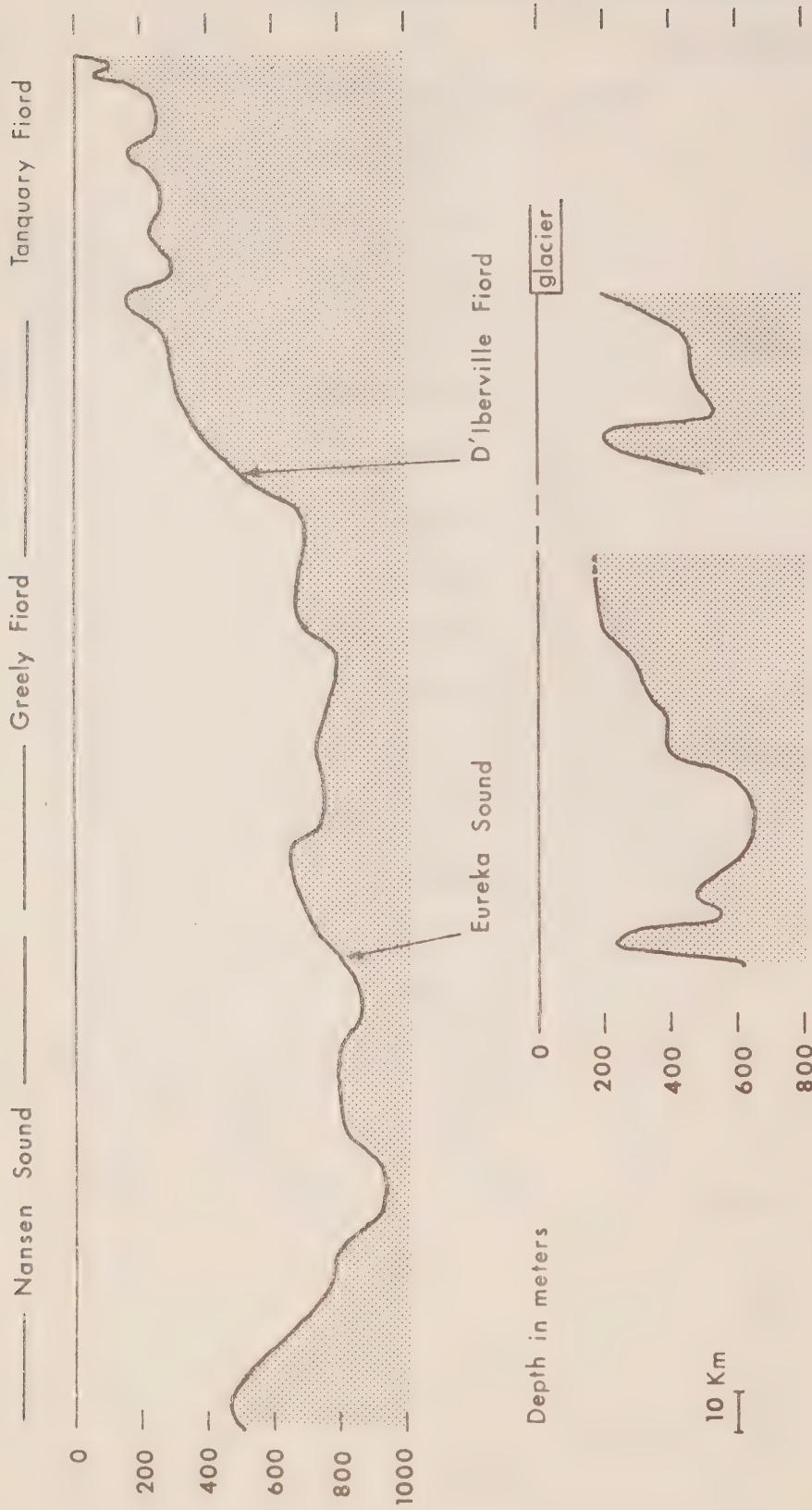
Eureka Sound

11	2029, 2030
----	------------

12	2031
----	------

13	2032
----	------

14	2033
----	------





occurred on or about October 9, 1975, when winds in excess of 40 knots were recorded at the Eureka weather station.

Little is known about the general water circulation in d'Iberville and Greely Fiords. It is known however that a significant southgoing current flows from Nansen Sound through Eureka Sound.

Data were collected by traversing the 230 km between the d'Iberville Fiord base and the Eureka weather station in 11 days using two especially equipped tracked vehicles. These vehicles and their associated equipment are described by Lewis (1971).

Data included in this report are limited to conductivity, temperature, pressure and the derived parameters salinity, sigma-T and sound velocity. Other information collected but not reported here concerned meteorological parameters, tides, current profiles, dissolved oxygen, the physics of sea ice and icebergs, and time lapse photography of ice movement.

The experiment sites are shown in Figure 1 and the experiment identification number(s) for each site are listed in Table 1. For convenience the data are grouped into one of three geographic areas, d'Iberville Fiord, Greely Fiord and Eureka Sound.

#### Data Recording

Conductivity (C), temperature (T) and pressure or depth (D) measurements were taken with Guildline Model 8101A CTD units. To monitor the accuracy of the CTD measurements water samples were taken from time to time with oceanographic bottles. These water samples were run through a Hytech Model 6220 bench salinometer calibrated with Standard Sea Water. Thermistors used to check water temperatures were calibrated in a triple point cell. Values obtained from a bench salinometer and a thermistor were compared to the CTD values obtained coincidentally and temperature and salinity corrections were determined. A detailed discussion of our methods of in situ measurements of conductivity and temperature can be found in Lewis and Sudar (1972).

The principal recording system for output of the Guildline instrument was a Vidar 5400 data logger with printed and punched paper tape output.

#### Data Processing

Salinity values determined from CTD data occasionally indicated statically unstable water structure. Where these apparent instabilities could be attributed to insufficiently fast initial instrument lowering speeds or to sharp vertical gradients the conductivity values were discarded.

#### Data Processing - Equations

##### (a) Salinity

The Perkin-Walker equation (Perkin and Walker, 1972) was used to calculate salinity (S) from values of conductivity (C), temperature (T) and pressure (P). The equation is a numerical fit to the experimental data of Brown and Allentoft with a linear pressure correction. The temperature values used are with respect to the International Practical Temperature Scale of 1968 (Comite International des Poids et Mesures, 1969).

Where units are C(mmho/cm), T(°C), P(db), S(‰) the equations used were:

$$C(S.T.O) = C(S.T.P) \left[ 1 + P \left\{ 49436 + 1567T + 21.33T^2 + 554.43C(S.T.P) \right\}^{-1} \right]^{-1}$$

$$R_t = C(S.T.O) \left[ 29.03916 (1 + .0297175T + .00015551T^2 - .000000789T^3) \right]^{-1}$$

$$R_o = R_t - 10^{-5} \left[ 6.0 + 380 \sin \pi \left\{ \frac{R_t + .04}{1.03} \right\} + 15 \sin 3\pi \left\{ \frac{R_t + .04}{1.03} \right\} \right] \\ \times \left[ \begin{array}{c} .0777T - .000454T^2 \\ -.000018T^3 \end{array} \right]$$

$$S = -.5933 + 32.4822R_o + 3.1106R_o^2 + .004 \sin 2\pi \left[ \frac{R_o - .64}{.57} \right]$$

for  $0.4 < R_o < 1.2$

$$S = -.2166 + 30.686R_o + 5.247R_o^2 \quad \text{for } 0.14 < R_o < 0.4$$

A correction must be added to salinities calculated from the above equations where temperatures fall below +1.0° C. The correction, based on Dauphinee's work, is

$$\Delta S = \delta [(-3.6 + 5.0T - 2.45T^2) 10^{-3}]$$

where  $\delta = 1$  for  $-2^\circ < T < 1^\circ \text{C}$ ,  $\delta = 0$  for  $T > 1^\circ \text{C}$

(b) Sigma  $\tau$

The sigma  $\tau$  equation was taken from the work of Cox, McCartney and Culkin (1970).

$$\sigma_t = \sum_i \sum_j A_{ij} T^i S^j$$

i	j	$A_{ij}$
0	0	$8.00969062 \times 10^{-2}$
0	1	$7.97018644 \times 10^{-1}$
0	2	$1.31710842 \times 10^{-4}$
0	3	$-6.11831499 \times 10^{-8}$
1	0	$5.88194023 \times 10^{-2}$
1	1	$-3.25310441 \times 10^{-3}$
1	2	$2.87941530 \times 10^{-6}$
2	0	$-8.11465413 \times 10^{-5}$
2	1	$3.89187483 \times 10^{-5}$
3	0	$4.76600414 \times 10^{-5}$



(c) Sound Velocity

Sound speed (V) was calculated using Wilson's (1960) equation where salinity (S) is in ‰, pressure (P) in db and V in msec<sup>-1</sup>.

$$V = \sum_{ijk} V_{ijk} Q^i (S-35)^j T^k$$

where  $Q = 1.00323 + 0.1019716P$

and where

$$\begin{aligned} V_{000} &= +1449.14 & V_{110} &= +7.7016 \times 10^{-5} \\ V_{001} &= +4.5721 & V_{111} &= +3.1580 \times 10^{-8} \\ V_{002} &= -4.4532 \times 10^{-2} & V_{112} &= +1.5790 \times 10^{-9} \\ V_{003} &= -2.6045 \times 10^{-4} & & \\ V_{004} &= +7.9851 \times 10^{-6} & V_{200} &= +1.0268 \times 10^{-5} \\ & & V_{201} &= -2.5294 \times 10^{-7} \\ & & V_{202} &= +1.8563 \times 10^{-9} \\ V_{010} &= +1.39799 & & \\ V_{011} &= -1.1244 \times 10^{-2} & & \\ V_{012} &= +7.7711 \times 10^{-7} & V_{210} &= -1.2943 \times 10^{-7} \\ & & & \\ V_{020} &= +1.69202 \times 10^{-3} & V_{300} &= +3.5216 \times 10^{-9} \\ & & V_{301} &= -1.9646 \times 10^{-10} \\ & & & \\ V_{100} &= +1.60272 \times 10^{-1} & & \\ V_{101} &= -1.8607 \times 10^{-4} & V_{400} &= -3.3603 \times 10^{-12} \\ V_{102} &= +7.4812 \times 10^{-6} & & \\ V_{103} &= +4.5283 \times 10^{-8} & & \end{aligned}$$

Data Format

Cruise: Cruise number assigned by C.O.D.C.

Title: Location description

Experiment No.: Experiment Number. Each CTD drop was assigned a unique experiment number. Listing is chronological, not by experiment number.

Lat.: Latitude of experimental site

<u>Long.:</u>	Longitude of experimental site
<u>Water depth:</u>	In meters
<u>Depth Incr.:</u>	Vertical increment in meters between sequential readings.
<u>Date:</u>	DDMMYY
<u>Local Time:</u>	HHMM, Greenwich mean time plus 5 hours.
<u>Depth:</u>	Corresponds to depth of the CTD transducers below water level as indicated by wire length. This is equivalent to depth as currents were negligible. The first depth is noted and the remaining depths are calculated.
<u>Press:</u>	Pressure in decibars as read by the CTD pressure transducer.
<u>Sal.:</u>	Salinity in parts per thousand (‰). The letter following the numerical value indicates the accuracy assigned to the value as discussed below.
<u>Temp.:</u>	Temperature in degrees Centigrade (°C). The letter following the numerical value indicates the accuracy assigned to the value as discussed below.
<u>Sigmat:</u>	Specific gravity anomaly, sigma-T
<u>Sound:</u>	Speed of propagation of sound in water in msec <sup>-1</sup>

#### Accuracy

The error estimate letter coding after temperature and salinity values is adapted from that used by C.O.D.C. Larger inaccuracies reflect the data processing discussed above and occur in regions of vertical gradients. Accuracies indicated in vertically homogeneous water should correspond to the best accuracy possible with the CTD system used. In this vertically homogeneous water accuracy is determined by comparison of CTD data and bottle and thermistor measurements as outlined above. In areas of vertical gradients the accuracy values assigned are subjective.

The numerical value indicated in the table below corresponds to the last (in this case the third) decimal place. Thus salinity accuracies of  $\pm 0.005$  and  $\pm 0.05$  appear as C and F respectively.

<u>Possible Error</u>	<u>Code Letter</u>
$\pm 0.005$	C
$\pm 0.010$	D
$\pm 0.020$	E
$\pm 0.050$	F



## REFERENCES

- Comite International des Poids et Mesures, 1969. The International Practical Temperature Scale of 1968. *Metrologia*, 5(2): pp 35-44.
- Cox. R. A., M. J. McCartney and F. Culkin, 1970. The Specific Gravity/Salinity/Temperature Relationship in Natural Sea Water. *Deep-Sea Res.*, 17(14):pp679
- Ford, W. L. and G. Hattersley-Smith, 1965. On the Oceanography of the Nansen Sound Fiord System. *Arctic*, 18(3): pp 158.
- Frozen Sea Research Group, 1973. Oceanographic Data Report - D'Iberville Fiord, Ellesmere Island, N.W.T., March to April 1973. Environment Canada, Marine Sciences Directorate, Pacific Region. Victoria, B.C. Pacific Marine Sciences Report #73-10. Unpublished manuscript.
- Frozen Sea Research Group, 1975. Oceanographic Data Report - D'Iberville Fiord, Ellesmere Island, N.W.T., March to April 1974, August 1974. Environment Canada, Institute of Ocean Sciences, Patricia Bay, Victoria, B.C. Pacific Marine Science Report #75-1. Unpublished manuscript.
- Frozen Sea Research Group, 1976. Oceanographic Data Report - D'Iberville Fiord, Ellesmere Island, N.W.T., March to April 1975. Environment Canada, Institute of Ocean Sciences, Patricia Bay, Victoria, B.C. Pacific Marine Science Report #76-19. Unpublished manuscript.
- Herlinveaux, R. H. 1974. Surface Movements in Canadian Arctic Waters with some Accompanying Temperature and Salinity Observations. Environment Canada. Marine Sciences Directorate, Pacific Region. Victoria, B.C. Pacific Marine Science Report (unnumbered). Unpublished manuscript.
- Hattersley-Smith, G., and H. Serson, 1966. Reconnaissance Oceanography over the ice of the Nansen Sound Fiord System, Operation Tanquary. Canada, Dept. of National Defense, Defense Research Board. Hazen 28. pp 1-13.
- Lake, R. A. and E. R. Walker, 1973. Notes on the Oceanography of D'Iberville Fiord, Arctic. 26(3): pp 222.
- Lake, R. A. and E. R. Walker, 1976. A Canadian Arctic Fiord with some Comparisons to Fiords of the Western Americas. *J. Fish. Res. Bd. Canada*. (in press).
- Lewis, E. L. and R. B. Sudar, 1972. Measurement of Conductivity and Temperature in the Sea for Salinity Determination, *J. Geophys. Res.* 77(33): pp 6611.
- Lewis, E. L. 1971. The Collection of Oceanographic Data from the Sea Ice Surface in Winter. From Proceedings First International Conference Port and Ocean Engineering under Arctic Conditions, Vol. 2, pp 1218-1224, Technical University, Norway.
- Perkin, R. G. and E. R. Walker, 1972. Salinity Calculations from In Situ Measurements. *J. Geophys. Res.*, 77(33): pp. 6618.
- Wilson, W. D. 1960. Speed of Sound in Sea Water as a Function of Temperature, Pressure and Salinity. *J. Acoustical Soc. Amer.*, 32(6): pp 5.





OCEANOGRAPHIC DATA

D'IBERVILLE FIORD

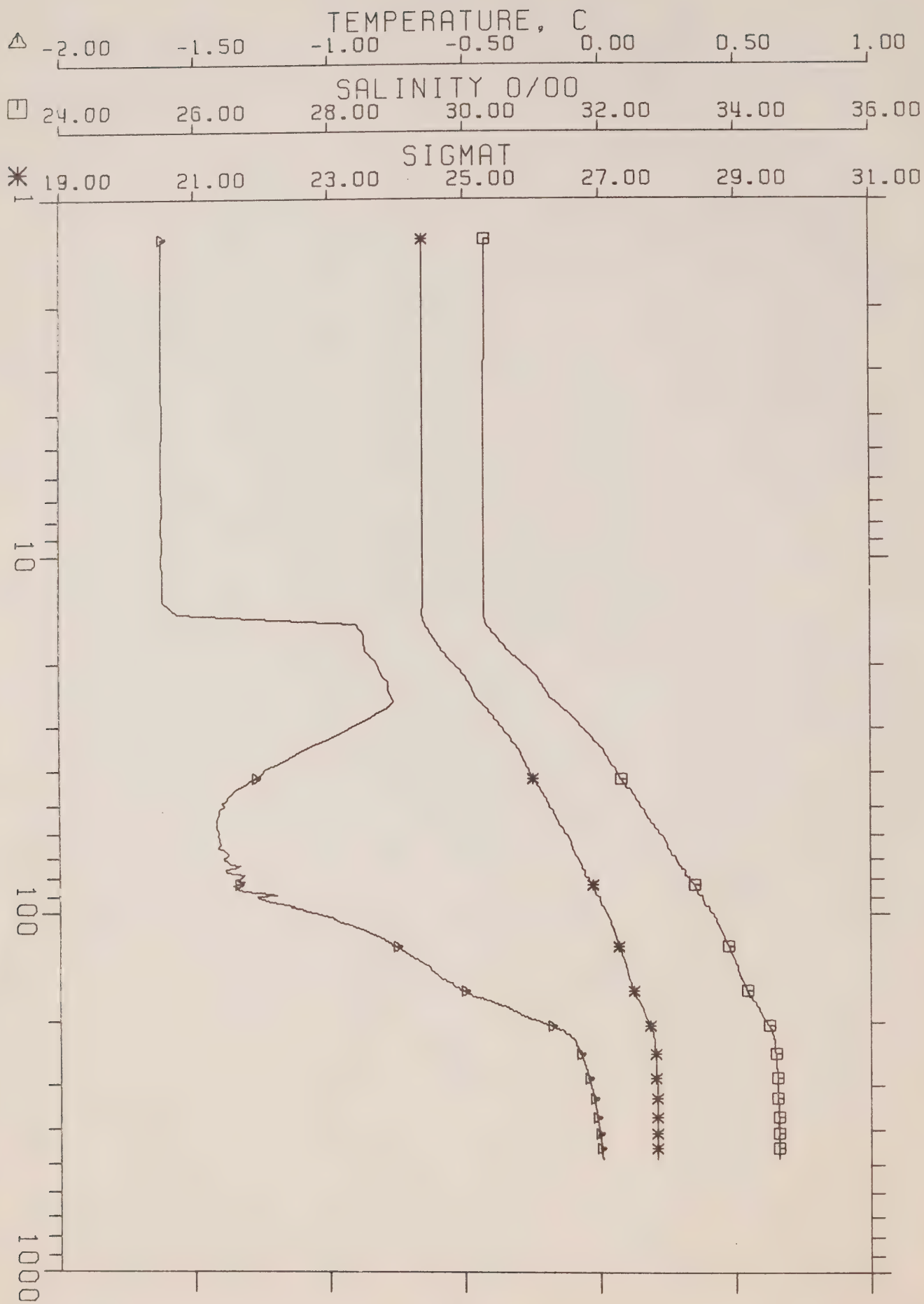






EXPERIMENT 2010

DEPTH M





CRUISE 15-76-015

D'IBERVILLE FIORD-76

EXPER NO. 2010

LAT N.80-34-45

LONG W.79-29-00

WATER DEPTH 495

DEPTH INCR.

DATE 080376

LOCAL TIME 1515

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
3.0	1.30	30.315 E	-1.618 D	24.403	1435.2
4.0	2.40	30.311 E	-1.618 D	24.400	1435.2
5.0	3.25	30.309 E	-1.618 D	24.398	1435.2
6.0	4.35	30.306 E	-1.617 D	24.396	1435.3
7.0	5.25	30.307 E	-1.618 D	24.396	1435.3
8.0	6.25	30.306 E	-1.618 D	24.396	1435.3
9.0	7.40	30.303 E	-1.617 D	24.393	1435.3
10.0	8.35	30.306 E	-1.618 D	24.396	1435.3
11.0	9.45	30.306 E	-1.617 D	24.396	1435.3
12.0	10.35	30.305 E	-1.618 D	24.395	1435.3
13.0	11.45	30.307 E	-1.617 D	24.396	1435.4
14.0	12.30	30.305 E	-1.617 D	24.394	1435.4
15.0	13.50	30.306 E	-1.616 D	24.395	1435.4
16.0	14.55	30.292 E	-1.562 D	24.383	1435.7
17.0	15.40	30.347 E	-0.899 D	24.415	1438.9
18.0	16.50	30.482 E	-0.869 D	24.523	1439.2
19.0	17.50	30.579 E	-0.871 D	24.602	1439.4
20.0	18.40	30.673 E	-0.864 D	24.677	1439.6
21.0	19.50	30.833 E	-0.831 D	24.805	1440.0
22.0	20.55	30.975 E	-0.817 D	24.919	1440.2
23.0	21.40	31.078 E	-0.807 D	25.002	1440.4
24.0	22.45	31.142 E	-0.782 D	25.053	1440.7
25.0	23.60	31.217 E	-0.780 D	25.114	1440.8
26.0	24.65	31.283 E	-0.772 D	25.167	1440.9
27.0	25.55	31.379 E	-0.760 D	25.244	1441.1
28.0	26.45	31.465 E	-0.782 D	25.314	1441.2
29.0	27.55	31.574 E	-0.825 D	25.404	1441.1
30.0	28.70	31.675 E	-0.866 D	25.487	1441.1
31.0	29.65	31.747 E	-0.910 D	25.546	1441.0
32.0	30.70	31.823 E	-0.939 D	25.608	1441.0
33.0	31.60	31.881 E	-0.975 D	25.656	1440.9
34.0	32.70	31.946 E	-1.014 D	25.710	1440.9
35.0	33.60	32.004 E	-1.057 D	25.758	1440.8
36.0	34.60	32.053 E	-1.087 D	25.798	1440.7
37.0	35.75	32.098 E	-1.119 D	25.836	1440.6
38.0	36.75	32.135 E	-1.145 D	25.866	1440.6
39.0	37.80	32.183 E	-1.182 D	25.906	1440.5
40.0	38.80	32.233 E	-1.218 D	25.947	1440.4
41.0	39.75	32.254 E	-1.233 D	25.965	1440.4
42.0	40.75	32.282 E	-1.247 D	25.988	1440.4
43.0	41.85	32.318 E	-1.268 D	26.018	1440.3
44.0	42.80	32.369 E	-1.295 D	26.059	1440.3
45.0	43.75	32.410 E	-1.317 D	26.093	1440.3
46.0	44.80	32.454 E	-1.340 D	26.130	1440.2
47.0	45.80	32.496 E	-1.357 D	26.163	1440.2
48.0	46.90	32.539 E	-1.370 D	26.199	1440.3
49.0	47.85	32.565 E	-1.377 D	26.220	1440.3
50.0	49.00	32.599 E	-1.393 D	26.248	1440.3
51.0	49.80	32.623 E	-1.387 D	26.267	1440.3
52.0	50.80	32.661 E	-1.398 D	26.298	1440.4
53.0	51.95	32.686 E	-1.403 D	26.319	1440.4
54.0	52.95	32.709 E	-1.403 D	26.338	1440.4
55.0	53.90	32.741 E	-1.411 D	26.364	1440.5
56.0	54.95	32.769 E	-1.413 D	26.386	1440.5
57.0	56.10	32.795 E	-1.417 D	26.407	1440.5
58.0	57.05	32.830 E	-1.417 D	26.436	1440.6
59.0	57.90	32.853 E	-1.417 D	26.454	1440.7
60.0	58.90	32.889 E	-1.409 D	26.484	1440.8
61.0	59.85	32.926 E	-1.405 D	26.513	1440.8
62.0	60.90	32.956 E	-1.409 D	26.538	1440.9
63.0	62.05	32.977 E	-1.405 D	26.555	1440.9
64.0	63.10	32.999 E	-1.405 D	26.572	1441.0

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
65.0	64.00	33.005 E	-1.402 D	26.577	1441.0
66.0	65.05	33.021 E	-1.409 D	26.591	1441.0
67.0	66.05	33.030 E	-1.389 D	26.597	1441.2
68.0	67.15	33.051 E	-1.381 D	26.614	1441.3
69.0	68.15	33.077 E	-1.369 D	26.635	1441.4
70.0	69.05	33.112 E	-1.373 D	26.663	1441.4
71.0	70.15	33.141 E	-1.389 D	26.687	1441.4
72.0	71.05	33.167 E	-1.374 D	26.707	1441.5
73.0	72.30	33.179 E	-1.366 D	26.717	1441.6
74.0	73.15	33.205 E	-1.327 D	26.737	1441.8
75.0	74.25	33.220 E	-1.348 D	26.750	1441.8
76.0	75.05	33.255 E	-1.384 D	26.779	1441.7
77.0	76.20	33.261 E	-1.378 D	26.784	1441.7
78.0	77.35	33.257 E	-1.311 D	26.779	1442.0
79.0	78.10	33.310 E	-1.313 D	26.822	1442.1
80.0	79.35	33.323 E	-1.333 D	26.833	1442.1
81.0	80.25	33.343 E	-1.338 D	26.849	1442.1
82.0	81.15	33.359 E	-1.308 D	26.861	1442.3
83.0	82.40	33.396 E	-1.334 D	26.892	1442.2
84.0	83.35	33.403 E	-1.356 D	26.899	1442.1
85.0	84.25	33.415 E	-1.338 D	26.908	1442.2
86.0	85.30	33.438 E	-1.335 D	26.926	1442.3
87.0	86.45	33.441 E	-1.309 D	26.927	1442.5
88.0	87.50	33.462 E	-1.214 D	26.942	1442.9
89.0	88.35	33.483 E	-1.191 D	26.958	1443.1
90.0	89.40	33.524 E	-1.265 D	26.993	1442.8
91.0	90.40	33.522 E	-1.247 D	26.992	1442.9
92.0	91.30	33.540 E	-1.239 D	27.005	1443.0
93.0	92.45	33.544 E	-1.203 D	27.008	1443.2
94.0	93.55	33.566 E	-1.157 D	27.024	1443.5
95.0	94.60	33.585 E	-1.129 D	27.039	1443.6
96.0	95.50	33.618 E	-1.138 D	27.066	1443.7
97.0	96.55	33.619 E	-1.105 D	27.065	1443.8
98.0	97.65	33.637 E	-1.081 D	27.079	1444.0
99.0	98.50	33.652 E	-1.049 D	27.090	1444.2
100.0	99.45	33.674 E	-1.031 D	27.107	1444.3
101.0	100.60	33.686 D	-1.019 C	27.117	1444.4
102.0	101.70	33.699 D	-0.993 C	27.126	1444.5
103.0	102.70	33.712 D	-0.982 C	27.137	1444.6
104.0	103.50	33.723 D	-0.980 C	27.145	1444.7
105.0	104.65	33.730 D	-0.955 C	27.151	1444.8
106.0	105.70	33.743 D	-0.935 C	27.160	1444.9
107.0	106.65	33.753 D	-0.921 C	27.167	1445.0
108.0	107.65	33.764 D	-0.907 C	27.176	1445.1
109.0	108.70	33.775 D	-0.894 C	27.185	1445.2
110.0	109.70	33.784 D	-0.882 C	27.192	1445.3
111.0	110.70	33.792 D	-0.866 C	27.197	1445.4
112.0	111.65	33.802 D	-0.856 C	27.205	1445.5
113.0	112.75	33.814 D	-0.845 C	27.214	1445.6
114.0	113.85	33.825 D	-0.836 C	27.223	1445.7
115.0	114.70	33.831 D	-0.821 C	27.227	1445.8
116.0	115.95	33.845 D	-0.813 C	27.238	1445.8
117.0	116.75	33.850 D	-0.802 C	27.241	1445.9
118.0	117.75	33.859 D	-0.794 C	27.249	1446.0
119.0	118.90	33.868 D	-0.783 C	27.255	1446.0
120.0	119.80	33.877 D	-0.776 C	27.262	1446.1
121.0	120.80	33.885 D	-0.770 C	27.269	1446.2
122.0	121.95	33.893 D	-0.759 C	27.275	1446.2
123.0	122.85	33.903 D	-0.750 C	27.282	1446.3
124.0	123.90	33.912 D	-0.742 C	27.290	1446.4
125.0	125.00	33.921 D	-0.734 C	27.297	1446.5
126.0	125.95	33.930 D	-0.724 C	27.303	1446.5
127.0	126.80	33.937 D	-0.718 C	27.309	1446.6
128.0	127.90	33.948 D	-0.710 C	27.317	1446.6
129.0	129.10	33.955 D	-0.703 C	27.323	1446.7
130.0	130.00	33.963 D	-0.696 C	27.329	1446.8
131.0	130.95	33.972 D	-0.688 C	27.336	1446.8
132.0	132.10	33.982 D	-0.681 C	27.344	1446.9
133.0	133.15	33.988 D	-0.674 C	27.349	1447.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
134.0	134.15	33.995 D	-0.668 C	27.354	1447.0
135.0	135.05	34.003 D	-0.661 C	27.360	1447.1
136.0	136.15	34.009 D	-0.653 C	27.365	1447.1
137.0	137.20	34.020 D	-0.644 C	27.373	1447.2
138.0	138.00	34.024 D	-0.639 C	27.377	1447.2
139.0	139.00	34.031 D	-0.634 C	27.382	1447.3
140.0	140.15	34.035 D	-0.629 C	27.385	1447.3
141.0	141.20	34.042 D	-0.625 C	27.390	1447.4
142.0	142.25	34.046 D	-0.623 C	27.393	1447.4
143.0	143.25	34.049 D	-0.620 C	27.396	1447.5
144.0	144.15	34.053 D	-0.617 C	27.398	1447.5
145.0	145.25	34.060 D	-0.605 C	27.404	1447.6
146.0	146.35	34.069 D	-0.604 C	27.411	1447.6
147.0	147.15	34.068 D	-0.601 C	27.410	1447.6
148.0	148.25	34.073 D	-0.596 C	27.414	1447.7
149.0	149.25	34.082 D	-0.588 C	27.421	1447.8
150.0	150.35	34.090 D	-0.581 C	27.427	1447.8
151.0	151.35	34.094 D	-0.576 C	27.430	1447.9
152.0	152.40	34.102 D	-0.569 C	27.437	1447.9
153.0	153.25	34.111 D	-0.558 C	27.443	1448.0
154.0	154.40	34.121 D	-0.553 C	27.451	1448.1
155.0	155.40	34.124 D	-0.547 C	27.453	1448.1
156.0	156.35	34.132 D	-0.543 C	27.459	1448.1
157.0	157.50	34.138 D	-0.539 C	27.464	1448.2
158.0	158.55	34.143 D	-0.531 C	27.468	1448.3
159.0	159.50	34.151 D	-0.523 C	27.474	1448.3
160.0	160.40	34.156 D	-0.518 C	27.478	1448.4
161.0	161.35	34.160 D	-0.514 C	27.480	1448.4
162.0	162.35	34.168 D	-0.509 C	27.487	1448.5
163.0	163.40	34.174 D	-0.502 C	27.491	1448.5
164.0	164.40	34.183 D	-0.493 C	27.499	1448.6
165.0	165.50	34.189 D	-0.486 C	27.503	1448.6
166.0	166.55	34.194 D	-0.482 C	27.507	1448.7
167.0	167.65	34.199 D	-0.475 C	27.510	1448.7
168.0	168.65	34.209 D	-0.467 C	27.519	1448.8
169.0	169.75	34.224 D	-0.450 C	27.530	1448.9
170.0	170.70	34.235 D	-0.440 C	27.538	1449.0
171.0	171.60	34.246 D	-0.426 C	27.547	1449.1
172.0	172.70	34.260 D	-0.416 C	27.558	1449.2
173.0	173.65	34.268 D	-0.407 C	27.564	1449.2
174.0	174.70	34.281 D	-0.397 C	27.573	1449.3
175.0	175.70	34.290 D	-0.388 C	27.581	1449.4
176.0	176.80	34.298 D	-0.380 C	27.586	1449.5
177.0	177.55	34.308 D	-0.369 C	27.594	1449.5
178.0	178.70	34.314 D	-0.362 C	27.599	1449.6
179.0	179.85	34.323 D	-0.354 C	27.605	1449.7
180.0	180.75	34.333 D	-0.342 C	27.613	1449.8
181.0	181.75	34.343 D	-0.332 C	27.621	1449.8
182.0	182.75	34.352 D	-0.329 C	27.628	1449.9
183.0	183.75	34.356 D	-0.324 C	27.631	1449.9
184.0	184.90	34.363 D	-0.317 C	27.636	1450.0
185.0	185.85	34.368 D	-0.312 C	27.640	1450.0
186.0	187.00	34.376 D	-0.304 C	27.646	1450.1
187.0	187.75	34.381 D	-0.299 C	27.650	1450.1
188.0	188.90	34.386 D	-0.294 C	27.654	1450.2
189.0	189.95	34.391 D	-0.287 C	27.657	1450.2
190.0	190.95	34.395 D	-0.284 C	27.661	1450.3
191.0	192.10	34.400 D	-0.280 C	27.665	1450.3
192.0	192.95	34.403 D	-0.269 C	27.666	1450.4
193.0	193.85	34.413 D	-0.260 C	27.674	1450.5
194.0	195.05	34.421 D	-0.249 C	27.680	1450.5
195.0	196.00	34.429 D	-0.239 C	27.686	1450.6
196.0	197.05	34.440 D	-0.231 C	27.694	1450.7
197.0	198.05	34.445 D	-0.225 C	27.698	1450.7
198.0	199.05	34.454 D	-0.217 C	27.705	1450.8
199.0	200.10	34.462 D	-0.212 C	27.711	1450.9
200.0	201.10	34.466 D	-0.203 C	27.714	1450.9
201.0	202.10	34.486 D	-0.192 C	27.729	1451.0
202.0	203.05	34.485 D	-0.184 C	27.728	1451.1

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
203.0	204.00	34.497 D	-0.178 C	27.738	1451.1
204.0	205.00	34.503 D	-0.171 C	27.742	1451.2
205.0	206.05	34.508 D	-0.164 C	27.746	1451.2
206.0	207.10	34.513 D	-0.159 C	27.750	1451.3
207.0	208.25	34.518 D	-0.154 C	27.753	1451.3
208.0	209.30	34.523 D	-0.148 C	27.758	1451.4
209.0	210.30	34.530 D	-0.142 C	27.763	1451.4
210.0	211.25	34.533 D	-0.137 C	27.765	1451.5
211.0	212.25	34.536 D	-0.132 C	27.767	1451.5
212.0	213.35	34.542 D	-0.130 C	27.772	1451.6
213.0	214.30	34.548 D	-0.123 C	27.776	1451.6
214.0	215.35	34.549 D	-0.117 C	27.777	1451.7
215.0	216.45	34.553 D	-0.116 C	27.780	1451.7
216.0	217.35	34.555 D	-0.112 C	27.781	1451.7
217.0	218.45	34.559 D	-0.112 C	27.784	1451.7
218.0	219.45	34.561 D	-0.109 C	27.786	1451.8
219.0	220.50	34.564 D	-0.106 C	27.788	1451.8
220.0	221.50	34.565 D	-0.100 C	27.789	1451.9
221.0	222.45	34.565 D	-0.099 C	27.792	1451.9
222.0	223.50	34.572 D	-0.097 C	27.794	1451.9
223.0	224.50	34.573 D	-0.094 C	27.795	1451.9
224.0	225.45	34.575 D	-0.093 C	27.796	1452.0
225.0	226.50	34.574 D	-0.092 C	27.796	1452.0
226.0	227.55	34.575 D	-0.092 C	27.797	1452.0
227.0	228.50	34.575 D	-0.090 C	27.796	1452.0
228.0	229.40	34.577 D	-0.090 C	27.798	1452.1
229.0	230.50	34.577 D	-0.089 C	27.798	1452.1
230.0	231.65	34.579 D	-0.089 C	27.800	1452.1
231.0	232.65	34.580 D	-0.086 C	27.800	1452.1
232.0	233.55	34.579 D	-0.085 C	27.800	1452.1
233.0	234.55	34.582 D	-0.083 C	27.802	1452.2
234.0	235.55	34.583 D	-0.082 C	27.803	1452.2
235.0	236.65	34.584 D	-0.081 C	27.804	1452.2
236.0	237.65	34.584 D	-0.079 C	27.803	1452.2
237.0	238.75	34.586 D	-0.078 C	27.804	1452.3
238.0	239.75	34.588 D	-0.078 C	27.806	1452.3
239.0	240.75	34.589 D	-0.077 C	27.807	1452.3
240.0	241.75	34.589 D	-0.076 C	27.807	1452.3
241.0	242.70	34.591 D	-0.075 C	27.809	1452.4
242.0	243.70	34.591 D	-0.073 C	27.809	1452.4
243.0	244.65	34.594 D	-0.073 C	27.811	1452.4
244.0	245.65	34.595 D	-0.072 C	27.811	1452.4
245.0	246.65	34.593 D	-0.070 C	27.810	1452.4
246.0	247.80	34.592 D	-0.068 C	27.809	1452.5
247.0	248.85	34.594 D	-0.068 C	27.811	1452.5
248.0	249.90	34.598 D	-0.068 C	27.814	1452.5
249.0	250.80	34.597 D	-0.067 C	27.813	1452.5
250.0	251.90	34.597 D	-0.065 C	27.813	1452.6
251.0	253.00	34.599 D	-0.066 C	27.815	1452.6
252.0	253.90	34.602 D	-0.065 C	27.817	1452.6
253.0	254.95	34.602 D	-0.064 C	27.817	1452.6
254.0	256.00	34.601 D	-0.063 C	27.816	1452.6
255.0	256.95	34.602 D	-0.062 C	27.817	1452.7
256.0	258.05	34.603 D	-0.062 C	27.818	1452.7
257.0	259.05	34.603 D	-0.061 C	27.818	1452.7
258.0	260.05	34.603 D	-0.059 C	27.817	1452.7
259.0	261.10	34.606 D	-0.060 C	27.820	1452.7
260.0	262.10	34.606 D	-0.058 C	27.820	1452.8
261.0	263.05	34.606 D	-0.057 C	27.820	1452.8
262.0	264.20	34.608 D	-0.057 C	27.822	1452.8
263.0	265.20	34.605 D	-0.055 C	27.819	1452.8
264.0	266.10	34.609 D	-0.055 C	27.822	1452.9
265.0	267.20	34.607 D	-0.054 C	27.821	1452.9
266.0	268.00	34.608 D	-0.054 C	27.822	1452.9
267.0	269.20	34.611 D	-0.054 C	27.823	1452.9
268.0	270.20	34.611 D	-0.052 C	27.823	1452.9
269.0	271.25	34.610 D	-0.052 C	27.823	1453.0
270.0	272.30	34.611 D	-0.051 C	27.823	1453.0
271.0	273.35	34.612 D	-0.051 C	27.824	1453.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
272.0	274.20	34.610 D	-0.049 C	27.823	1453.0
273.0	275.15	34.613 D	-0.049 C	27.825	1453.0
274.0	276.15	34.611 D	-0.048 C	27.823	1453.1
275.0	277.20	34.613 D	-0.049 C	27.825	1453.1
276.0	278.30	34.612 D	-0.047 C	27.824	1453.1
277.0	279.35	34.613 D	-0.048 C	27.825	1453.1
278.0	280.30	34.615 D	-0.047 C	27.826	1453.1
279.0	281.30	34.617 D	-0.047 C	27.828	1453.2
280.0	282.35	34.615 D	-0.045 C	27.827	1453.2
281.0	283.50	34.616 D	-0.045 C	27.827	1453.2
282.0	284.50	34.617 D	-0.045 C	27.828	1453.2
283.0	285.45	34.618 D	-0.044 C	27.829	1453.2
284.0	286.55	34.618 D	-0.044 C	27.828	1453.3
285.0	287.45	34.618 D	-0.044 C	27.829	1453.3
286.0	288.55	34.620 D	-0.043 C	27.830	1453.3
287.0	289.50	34.619 D	-0.042 C	27.830	1453.3
288.0	290.60	34.618 D	-0.041 C	27.828	1453.3
289.0	291.60	34.621 D	-0.042 C	27.831	1453.4
290.0	292.65	34.619 D	-0.040 C	27.830	1453.4
291.0	293.55	34.620 D	-0.040 C	27.830	1453.4
292.0	294.65	34.621 D	-0.040 C	27.831	1453.4
293.0	295.65	34.619 D	-0.037 C	27.829	1453.4
294.0	296.60	34.622 D	-0.038 C	27.832	1453.5
295.0	297.55	34.622 D	-0.037 C	27.831	1453.5
296.0	298.65	34.624 D	-0.038 C	27.833	1453.5
297.0	299.70	34.621 D	-0.035 C	27.831	1453.5
298.0	300.60	34.621 D	-0.034 C	27.831	1453.5
299.0	301.55	34.623 D	-0.035 C	27.832	1453.6
300.0	302.55	34.623 D	-0.034 C	27.832	1453.6
301.0	303.55	34.625 D	-0.034 C	27.834	1453.6
302.0	304.60	34.625 D	-0.033 C	27.833	1453.6
303.0	305.70	34.624 D	-0.033 C	27.833	1453.6
304.0	306.60	34.624 D	-0.031 C	27.833	1453.7
305.0	307.60	34.622 D	-0.030 C	27.831	1453.7
306.0	308.65	34.626 D	-0.031 C	27.834	1453.7
307.0	309.65	34.625 D	-0.031 C	27.834	1453.7
308.0	310.70	34.625 D	-0.030 C	27.833	1453.7
309.0	311.80	34.625 D	-0.030 C	27.834	1453.7
310.0	312.85	34.628 D	-0.030 C	27.836	1453.8
311.0	313.85	34.627 D	-0.030 C	27.835	1453.8
312.0	314.90	34.627 D	-0.029 C	27.835	1453.8
313.0	315.90	34.625 D	-0.027 C	27.834	1453.8
314.0	316.90	34.626 D	-0.027 C	27.835	1453.8
315.0	318.00	34.627 D	-0.028 C	27.835	1453.9
316.0	319.00	34.626 D	-0.027 C	27.835	1453.9
317.0	319.85	34.626 D	-0.027 C	27.834	1453.9
318.0	320.85	34.627 D	-0.027 C	27.835	1453.9
319.0	322.00	34.628 D	-0.027 C	27.836	1453.9
320.0	322.90	34.630 D	-0.027 C	27.837	1453.9
321.0	324.05	34.627 D	-0.025 C	27.835	1454.0
322.0	325.05	34.628 D	-0.025 C	27.836	1454.0
323.0	326.05	34.628 D	-0.024 C	27.835	1454.0
324.0	327.05	34.629 D	-0.025 C	27.837	1454.0
325.0	328.05	34.629 D	-0.024 C	27.837	1454.0
326.0	329.15	34.629 D	-0.024 C	27.836	1454.1
327.0	330.15	34.630 D	-0.023 C	27.837	1454.1
328.0	331.00	34.628 D	-0.022 C	27.836	1454.1
329.0	332.15	34.630 D	-0.023 C	27.837	1454.1
330.0	333.20	34.630 D	-0.022 C	27.837	1454.1
331.0	334.20	34.630 D	-0.023 C	27.838	1454.2
332.0	335.30	34.628 D	-0.022 C	27.836	1454.2
333.0	336.15	34.628 D	-0.020 C	27.836	1454.2
334.0	337.10	34.629 D	-0.021 C	27.837	1454.2
335.0	338.15	34.632 D	-0.022 C	27.839	1454.2
336.0	339.25	34.632 D	-0.022 C	27.839	1454.2
337.0	340.30	34.630 D	-0.020 C	27.838	1454.3
338.0	341.35	34.627 D	-0.018 C	27.835	1454.3
339.0	342.35	34.631 D	-0.020 C	27.838	1454.3
340.0	343.35	34.631 D	-0.020 C	27.838	1454.3

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
341.0	344.45	34.631 D	-0.019 C	27.838	1454.3
342.0	345.45	34.629 D	-0.018 C	27.837	1454.4
343.0	346.35	34.629 D	-0.017 C	27.836	1454.4
344.0	347.25	34.632 D	-0.019 C	27.839	1454.4
345.0	348.40	34.630 D	-0.018 C	27.838	1454.4
346.0	349.45	34.632 D	-0.017 C	27.838	1454.4
347.0	350.45	34.631 D	-0.016 C	27.838	1454.5
348.0	351.40	34.628 D	-0.014 C	27.836	1454.5
349.0	352.45	34.629 D	-0.014 C	27.836	1454.5
350.0	353.50	34.631 D	-0.016 C	27.838	1454.5
351.0	354.45	34.630 D	-0.014 C	27.837	1454.5
352.0	355.50	34.628 D	-0.013 C	27.835	1454.5
353.0	356.55	34.629 D	-0.013 C	27.836	1454.6
354.0	357.45	34.631 D	-0.014 C	27.837	1454.6
355.0	358.50	34.629 D	-0.013 C	27.836	1454.6
356.0	359.65	34.631 D	-0.014 C	27.838	1454.6
357.0	360.60	34.629 D	-0.012 C	27.836	1454.6
358.0	361.50	34.630 D	-0.013 C	27.837	1454.6
359.0	362.60	34.631 D	-0.013 C	27.838	1454.7
360.0	363.65	34.631 D	-0.014 C	27.838	1454.7
361.0	364.50	34.630 D	-0.012 C	27.837	1454.7
362.0	365.60	34.631 D	-0.012 C	27.837	1454.7
363.0	366.80	34.633 D	-0.013 C	27.839	1454.7
364.0	367.75	34.632 D	-0.012 C	27.839	1454.8
365.0	368.70	34.633 D	-0.013 C	27.839	1454.8
366.0	369.75	34.630 D	-0.011 C	27.837	1454.8
367.0	370.80	34.631 D	-0.011 C	27.838	1454.8
368.0	371.70	34.630 D	-0.011 C	27.837	1454.8
369.0	372.70	34.630 D	-0.010 C	27.837	1454.8
370.0	373.90	34.631 D	-0.010 C	27.837	1454.9
371.0	374.75	34.635 D	-0.014 C	27.841	1454.9
372.0	375.80	34.632 D	-0.010 C	27.839	1454.9
373.0	376.75	34.630 D	-0.008 C	27.836	1454.9
374.0	377.80	34.634 D	-0.012 C	27.840	1454.9
375.0	378.95	34.632 D	-0.010 C	27.838	1454.9
376.0	379.85	34.633 D	-0.010 C	27.839	1455.0
377.0	380.95	34.629 D	-0.007 C	27.836	1455.0
378.0	381.80	34.631 D	-0.009 C	27.837	1455.0
379.0	382.95	34.629 D	-0.007 C	27.836	1455.0
380.0	384.00	34.636 D	-0.012 C	27.841	1455.0
381.0	384.95	34.635 D	-0.011 C	27.841	1455.0
382.0	386.00	34.633 D	-0.008 C	27.839	1455.1
383.0	387.00	34.630 D	-0.007 C	27.836	1455.1
384.0	388.05	34.632 D	-0.008 C	27.838	1455.1
385.0	389.00	34.630 D	-0.006 C	27.837	1455.1
386.0	390.05	34.632 D	-0.007 C	27.838	1455.1
387.0	391.15	34.629 D	-0.006 C	27.836	1455.2
388.0	392.10	34.629 D	-0.005 C	27.835	1455.2
389.0	393.00	34.637 D	-0.010 C	27.842	1455.2
390.0	394.20	34.634 D	-0.008 C	27.840	1455.2
391.0	394.95	34.631 D	-0.006 C	27.837	1455.2
392.0	396.10	34.633 D	-0.007 C	27.839	1455.2
393.0	397.20	34.632 D	-0.007 C	27.838	1455.3
394.0	398.25	34.632 D	-0.006 C	27.838	1455.3
395.0	399.25	34.636 D	-0.010 C	27.842	1455.3
396.0	400.20	34.630 D	-0.004 C	27.836	1455.3
397.0	401.35	34.633 D	-0.006 C	27.839	1455.3
398.0	402.25	34.632 D	-0.006 C	27.839	1455.3
399.0	403.30	34.632 D	-0.006 C	27.838	1455.4
400.0	404.15	34.632 D	-0.005 C	27.838	1455.4
401.0	405.25	34.633 D	-0.004 C	27.839	1455.4
402.0	406.25	34.631 D	-0.004 C	27.837	1455.4
403.0	407.30	34.633 D	-0.005 C	27.839	1455.4
404.0	408.40	34.633 D	-0.005 C	27.839	1455.5
405.0	409.25	34.632 D	-0.003 C	27.838	1455.5
406.0	410.35	34.636 D	-0.007 C	27.841	1455.5
407.0	411.45	34.632 D	-0.004 C	27.838	1455.5
408.0	412.25	34.637 D	-0.008 C	27.843	1455.5
409.0	413.50	34.632 D	-0.004 C	27.838	1455.5



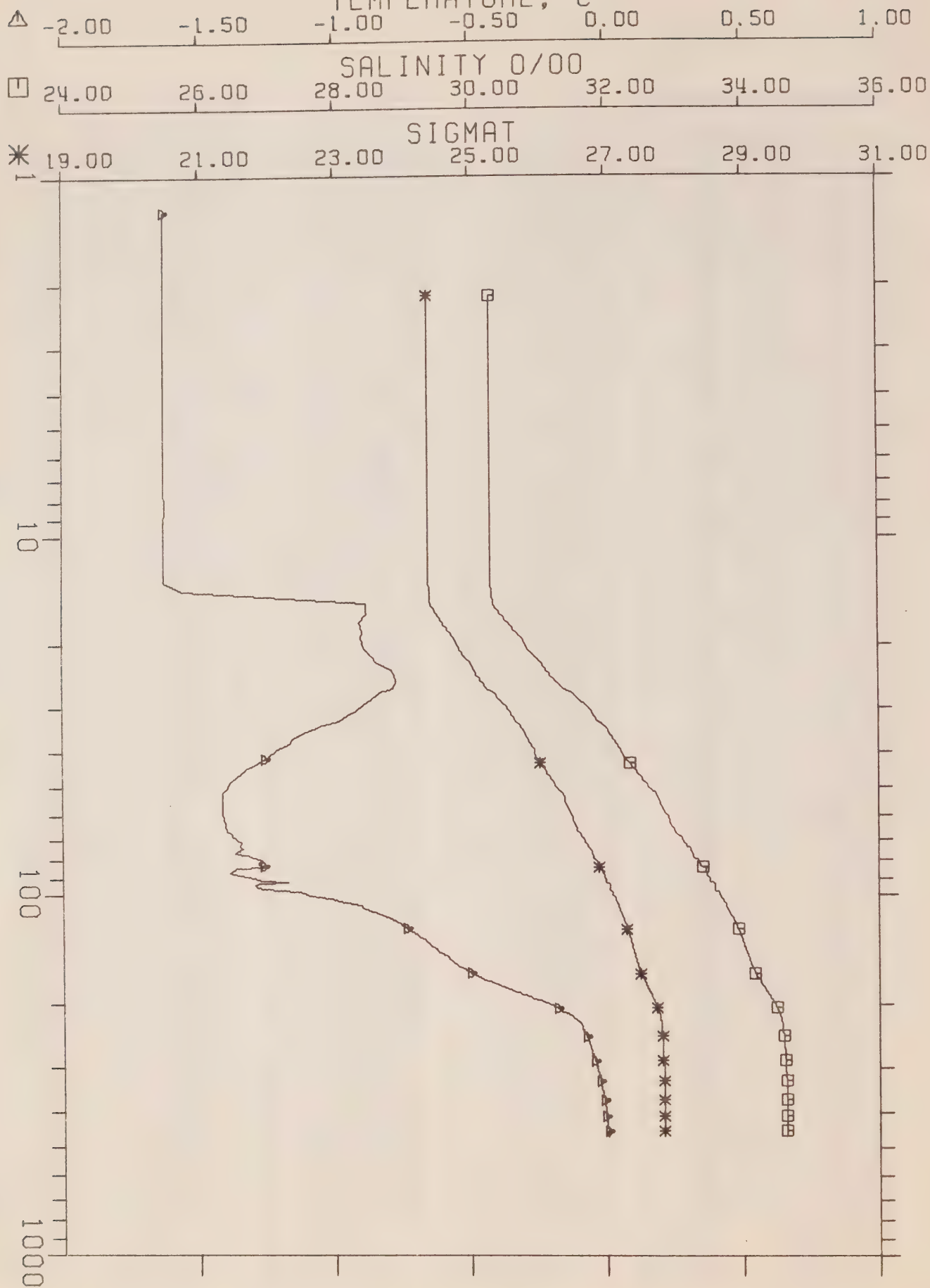
DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
410.0	414.45	34.629 D	-0.002 C	27.836	1455.6
411.0	415.35	34.630 D	-0.002 C	27.837	1455.6
412.0	416.55	34.630 D	-0.005 C	27.837	1455.6
413.0	417.35	34.629 D	-0.001 C	27.836	1455.6
414.0	418.55	34.631 D	-0.003 C	27.837	1455.6
415.0	419.55	34.630 D	0.0 C	27.836	1455.7
416.0	420.60	34.630 D	-0.001 C	27.837	1455.7
417.0	421.45	34.630 D	0.0 C	27.836	1455.7
418.0	422.70	34.633 D	-0.002 C	27.839	1455.7
419.0	423.40	34.630 D	0.0 C	27.837	1455.7
420.0	424.55	34.631 D	0.0 C	27.837	1455.7
421.0	425.65	34.632 D	0.0 C	27.838	1455.8
422.0	426.45	34.630 D	0.001 C	27.837	1455.8
423.0	427.55	34.632 D	0.0 C	27.838	1455.8
424.0	428.75	34.633 D	0.0 C	27.839	1455.8
425.0	429.65	34.631 D	0.001 C	27.837	1455.8
426.0	430.55	34.632 D	0.001 C	27.838	1455.8
427.0	431.70	34.631 D	0.002 C	27.837	1455.9
428.0	432.75	34.632 D	0.003 C	27.837	1455.9
429.0	433.60	34.631 D	0.003 C	27.837	1455.9
430.0	434.75	34.632 D	0.002 C	27.837	1455.9
431.0	435.70	34.631 D	0.003 C	27.837	1455.9
432.0	436.85	34.633 D	0.001 C	27.839	1456.0
433.0	437.75	34.632 D	0.003 C	27.837	1456.0
434.0	438.80	34.632 D	0.002 C	27.838	1456.0
435.0	439.65	34.629 D	0.004 C	27.836	1456.0
436.0	440.90	34.631 D	0.003 C	27.837	1456.0
437.0	441.80	34.634 D	0.001 C	27.840	1456.0
438.0	442.85	34.633 D	0.002 C	27.838	1456.1
439.0	443.95	34.632 D	0.001 C	27.838	1456.1
440.0	444.85	34.631 D	0.002 C	27.837	1456.1
441.0	445.90	34.631 D	0.003 C	27.837	1456.1
442.0	446.90	34.632 D	0.002 C	27.837	1456.1
443.0	448.05	34.632 D	0.002 C	27.838	1456.1
444.0	448.95	34.633 D	0.002 C	27.839	1456.2
445.0	450.00	34.634 D	0.002 C	27.839	1456.2
446.0	450.95	34.632 D	0.003 C	27.838	1456.2
447.0	451.90	34.631 D	0.004 C	27.837	1456.2
448.0	453.05	34.631 D	0.004 C	27.837	1456.2
449.0	453.95	34.634 D	0.001 C	27.840	1456.2
450.0	454.95	34.634 D	0.003 C	27.840	1456.3
451.0	456.10	34.634 D	0.003 C	27.839	1456.3
452.0	457.00	34.633 D	0.003 C	27.839	1456.3
453.0	458.05	34.633 D	0.003 C	27.838	1456.3
454.0	459.10	34.633 D	0.003 C	27.839	1456.3
455.0	460.00	34.634 D	0.003 C	27.840	1456.3
456.0	461.20	34.634 D	0.003 C	27.839	1456.4
457.0	462.15	34.633 D	0.003 C	27.839	1456.4
458.0	463.05	34.634 D	0.003 C	27.839	1456.4
459.0	464.10	34.632 D	0.004 C	27.838	1456.4
460.0	465.25	34.633 D	0.004 C	27.838	1456.4
461.0	466.35	34.634 D	0.004 C	27.839	1456.5
462.0	467.20	34.632 D	0.005 C	27.838	1456.5
463.0	468.30	34.633 D	0.005 C	27.838	1456.5
464.0	469.25	34.633 D	0.006 C	27.838	1456.5
465.0	470.20	34.633 D	0.005 C	27.839	1456.5
466.0	471.25	34.633 D	0.006 C	27.838	1456.5
467.0	472.35	34.635 D	0.006 C	27.840	1456.6
468.0	473.45	34.634 D	0.006 C	27.839	1456.6
469.0	474.50	34.635 D	0.006 C	27.840	1456.6
470.0	475.50	34.635 D	0.006 C	27.840	1456.6
471.0	476.50	34.633 D	0.008 C	27.838	1456.6
472.0	477.30	34.634 D	0.008 C	27.839	1456.7
473.0	478.25	34.634 D	0.009 C	27.839	1456.7
474.0	479.45	34.634 D	0.010 C	27.839	1456.7

TEMPERATURE, C

SALINITY 0/00

SIGMAT

DEPTH M



CRUISE 15-76-015

D'IBERVILLE FIORD-76

EXPER NO. 2011

LAT N.80-34-45

LONG W.79-29-00

WATER DEPTH 495

DEPTH INCR.

DATE 090376

LOCAL TIME 1100

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
2.0	1.25		-1.624 D		
3.0	2.15	30.322 E	-1.624 D	24.408	1435.2
4.0	3.25	30.320 E	-1.623 D	24.407	1435.2
5.0	4.30	30.320 E	-1.623 D	24.407	1435.2
6.0	5.40	30.320 E	-1.623 D	24.407	1435.3
7.0	6.30	30.321 E	-1.624 D	24.408	1435.3
8.0	7.35	30.319 E	-1.623 D	24.406	1435.3
9.0	8.35	30.316 E	-1.622 D	24.404	1435.3
10.0	9.35	30.317 E	-1.623 D	24.404	1435.3
11.0	10.25	30.318 E	-1.623 D	24.405	1435.3
12.0	11.40	30.317 E	-1.623 D	24.405	1435.4
13.0	12.25	30.316 E	-1.624 D	24.404	1435.4
14.0	13.40	30.317 E	-1.624 D	24.405	1435.4
15.0	14.25		-1.557 D		
16.0	15.45	30.355 E	-0.891 D	24.421	1439.0
17.0	16.50	30.474 E	-0.881 D	24.516	1439.2
18.0	17.45	30.577 E	-0.903 D	24.601	1439.2
19.0	18.50	30.691 E	-0.895 D	24.692	1439.4
20.0	19.30	30.791 E	-0.900 D	24.773	1439.6
21.0	20.50	30.866 E	-0.890 D	24.834	1439.7
22.0	21.55	30.978 E	-0.860 D	24.923	1440.1
23.0	22.35	31.068 E	-0.846 D	24.996	1440.3
24.0	23.50	31.142 E	-0.785 D	25.053	1440.7
25.0	24.60	31.225 E	-0.774 D	25.120	1440.8
26.0	25.40	31.296 E	-0.770 D	25.178	1441.0
27.0	26.60	31.406 E	-0.781 D	25.267	1441.1
28.0	27.40	31.520 E	-0.830 D	25.360	1441.0
29.0	28.55	31.621 E	-0.861 D	25.443	1441.1
30.0	29.60	31.715 E	-0.892 D	25.520	1441.1
31.0	30.65	31.792 E	-0.916 D	25.582	1441.1
32.0	31.50	31.845 E	-0.949 D	25.626	1441.0
33.0	32.60	31.904 E	-0.980 D	25.675	1441.0
34.0	33.60	31.977 E	-1.041 D	25.736	1440.8
35.0	34.50	32.038 E	-1.077 D	25.786	1440.7
36.0	35.65	32.082 E	-1.126 D	25.823	1440.6
37.0	36.70	32.127 E	-1.156 D	25.860	1440.5
38.0	37.55	32.163 E	-1.162 D	25.889	1440.6
39.0	38.75	32.212 E	-1.199 D	25.930	1440.5
40.0	39.65	32.238 E	-1.217 D	25.952	1440.4
41.0	40.75	32.260 E	-1.234 D	25.970	1440.4
42.0	41.75	32.303 E	-1.256 D	26.005	1440.4
43.0	42.70	32.350 E	-1.282 D	26.044	1440.3
44.0	43.75	32.401 E	-1.310 D	26.085	1440.3
45.0	44.70	32.445 E	-1.327 D	26.122	1440.3
46.0	45.80	32.479 E	-1.342 D	26.150	1440.3
47.0	46.75	32.517 E	-1.357 D	26.181	1440.3
48.0	47.85	32.564 E	-1.375 D	26.219	1440.3
49.0	48.80	32.597 E	-1.383 D	26.246	1440.3
50.0	49.80	32.637 E	-1.392 D	26.279	1440.3
51.0	50.85	32.680 E	-1.401 D	26.314	1440.4
52.0	51.65	32.730 E	-1.408 D	26.355	1440.4
53.0	52.80	32.760 E	-1.409 D	26.379	1440.5
54.0	53.70	32.776 E	-1.409 D	26.392	1440.5
55.0	54.90	32.791 E	-1.410 D	26.404	1440.5
56.0	55.95	32.816 E	-1.411 D	26.425	1440.6
57.0	56.70	32.835 E	-1.412 D	26.440	1440.6
58.0	57.85	32.867 E	-1.412 D	26.465	1440.7
59.0	58.70	32.883 E	-1.409 D	26.479	1440.7
60.0	59.90	32.911 E	-1.408 D	26.501	1440.8
61.0	61.00	32.931 E	-1.405 D	26.517	1440.9
62.0	61.80	32.946 E	-1.404 D	26.529	1440.9
63.0	63.00	32.954 E	-1.402 D	26.536	1440.9



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
202.0	203.80	34.492 D	-0.181 C	27.734	1451.1
203.0	204.80	34.502 D	-0.176 C	27.742	1451.1
204.0	205.80	34.507 D	-0.172 C	27.745	1451.2
205.0	206.90	34.507 D	-0.168 C	27.746	1451.2
206.0	207.95	34.514 D	-0.164 C	27.750	1451.3
207.0	208.90	34.516 D	-0.158 C	27.752	1451.3
208.0	209.85	34.519 D	-0.151 C	27.754	1451.4
209.0	210.75	34.528 D	-0.145 C	27.761	1451.4
210.0	211.80	34.535 D	-0.139 C	27.766	1451.5
211.0	212.90	34.540 D	-0.133 C	27.770	1451.5
212.0	213.95	34.543 D	-0.130 C	27.773	1451.6
213.0	215.00	34.545 D	-0.125 C	27.774	1451.6
214.0	216.00	34.551 D	-0.122 C	27.779	1451.6
215.0	216.95	34.554 D	-0.118 C	27.780	1451.7
216.0	218.00	34.556 D	-0.116 C	27.783	1451.7
217.0	219.05	34.558 D	-0.113 C	27.784	1451.8
218.0	220.10	34.562 D	-0.109 C	27.786	1451.8
219.0	221.05	34.566 D	-0.107 C	27.790	1451.8
220.0	221.90	34.566 D	-0.105 C	27.790	1451.8
221.0	222.95	34.567 D	-0.101 C	27.790	1451.9
222.0	224.05	34.572 D	-0.099 C	27.795	1451.9
223.0	224.95	34.573 D	-0.096 C	27.795	1451.9
224.0	226.05	34.574 D	-0.093 C	27.796	1452.0
225.0	226.95	34.578 D	-0.093 C	27.799	1452.0
226.0	228.05	34.575 D	-0.090 C	27.797	1452.0
227.0	229.00	34.580 D	-0.092 C	27.800	1452.0
228.0	230.20	34.580 D	-0.091 C	27.800	1452.1
229.0	231.00	34.582 D	-0.091 C	27.802	1452.1
230.0	232.20	34.582 D	-0.090 C	27.802	1452.1
231.0	233.05	34.582 D	-0.090 C	27.802	1452.1
232.0	234.15	34.582 D	-0.090 C	27.802	1452.1
233.0	235.20	34.582 D	-0.086 C	27.802	1452.2
234.0	236.10	34.586 D	-0.086 C	27.805	1452.2
235.0	237.25	34.586 D	-0.084 C	27.805	1452.2
236.0	238.40	34.587 D	-0.083 C	27.806	1452.2
237.0	239.25	34.588 D	-0.080 C	27.806	1452.3
238.0	240.40	34.589 D	-0.079 C	27.807	1452.3
239.0	241.30	34.591 D	-0.078 C	27.809	1452.3
240.0	242.35	34.591 D	-0.076 C	27.809	1452.3
241.0	243.25	34.592 D	-0.076 C	27.809	1452.4
242.0	244.30	34.595 D	-0.075 C	27.811	1452.4
243.0	245.50	34.596 D	-0.074 C	27.812	1452.4
244.0	246.45	34.597 D	-0.073 C	27.813	1452.4
245.0	247.45	34.597 D	-0.071 C	27.813	1452.5
246.0	248.35	34.598 D	-0.070 C	27.814	1452.5
247.0	249.30	34.599 D	-0.070 C	27.815	1452.5
248.0	250.35	34.600 D	-0.069 C	27.815	1452.5
249.0	251.50	34.600 D	-0.068 C	27.815	1452.5
250.0	252.50	34.601 D	-0.067 C	27.816	1452.6
251.0	253.55	34.599 D	-0.065 C	27.815	1452.6
252.0	254.55	34.604 D	-0.067 C	27.818	1452.6
253.0	255.60	34.604 D	-0.065 C	27.818	1452.6
254.0	256.60	34.602 D	-0.064 C	27.817	1452.7
255.0	257.60	34.603 D	-0.063 C	27.818	1452.7
256.0	258.65	34.607 D	-0.064 C	27.821	1452.7
257.0	259.70	34.605 D	-0.062 C	27.819	1452.7
258.0	260.60	34.608 D	-0.061 C	27.821	1452.7
259.0	261.50	34.608 D	-0.060 C	27.821	1452.8
260.0	262.50	34.608 D	-0.058 C	27.821	1452.8
261.0	263.50	34.608 D	-0.058 C	27.822	1452.8
262.0	264.70	34.610 D	-0.059 C	27.823	1452.8
263.0	265.65	34.610 D	-0.058 C	27.823	1452.8
264.0	266.55	34.611 D	-0.057 C	27.824	1452.9
265.0	267.65	34.611 D	-0.056 C	27.824	1452.9
266.0	268.75	34.610 D	-0.055 C	27.823	1452.9
267.0	269.70	34.611 D	-0.055 C	27.824	1452.9
268.0	270.70	34.614 D	-0.054 C	27.826	1452.9
269.0	271.85	34.612 D	-0.053 C	27.824	1453.0
270.0	272.70	34.614 D	-0.053 C	27.826	1453.0

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
64.0	63.95	32.972 E	-1.400 D	26.551	1441.0
65.0	64.85	32.999 E	-1.398 D	26.572	1441.1
66.0	66.05	33.019 E	-1.395 D	26.588	1441.1
67.0	66.85	33.050 E	-1.381 D	26.613	1441.2
68.0	67.95	33.082 E	-1.376 D	26.639	1441.3
69.0	69.00	33.113 E	-1.366 D	26.664	1441.4
70.0	70.00	33.133 E	-1.355 D	26.679	1441.5
71.0	70.95	33.153 E	-1.342 D	26.696	1441.6
72.0	72.05	33.183 E	-1.343 D	26.720	1441.7
73.0	73.10	33.202 E	-1.344 D	26.735	1441.7
74.0	74.00	33.230 E	-1.333 D	26.758	1441.8
75.0	75.05	33.253 E	-1.354 D	26.776	1441.8
76.0	76.15	33.271 E	-1.363 D	26.791	1441.8
77.0	77.10	33.289 E	-1.313 D	26.804	1442.1
78.0	78.10	33.307 E	-1.296 D	26.819	1442.2
79.0	79.05	33.328 E	-1.275 D	26.835	1442.3
80.0	80.00	33.353 E	-1.265 D	26.855	1442.4
81.0	81.15	33.380 E	-1.282 D	26.877	1442.4
82.0	82.25	33.390 E	-1.261 D	26.885	1442.5
83.0	83.25	33.412 E	-1.254 D	26.903	1442.6
84.0	84.15	33.461 E	-1.359 D	26.945	1442.2
85.0	85.25	33.453 E	-1.374 D	26.939	1442.1
86.0	86.30	33.472 E	-1.383 D	26.954	1442.1
87.0	87.20	33.485 E	-1.372 D	26.965	1442.2
88.0	88.05	33.497 E	-1.318 D	26.973	1442.5
89.0	89.20	33.517 E	-1.297 D	26.989	1442.7
90.0	90.30	33.528 E	-1.265 D	26.997	1442.8
91.0	91.20	33.535 E	-1.170 D	26.999	1443.3
92.0	92.30	33.590 E	-1.277 D	27.047	1442.9
93.0	93.25	33.599 E	-1.296 D	27.055	1442.9
94.0	94.30	33.603 E	-1.286 D	27.058	1442.9
95.0	95.30	33.604 E	-1.262 D	27.058	1443.1
96.0	96.40	33.606 E	-1.193 D	27.057	1443.4
97.0	97.25	33.626 E	-1.137 D	27.072	1443.7
98.0	98.35	33.651 E	-1.110 D	27.092	1443.9
99.0	99.45	33.670 E	-1.088 D	27.106	1444.0
100.0	100.35	33.683 D	-1.054 C	27.115	1444.2
101.0	101.45	33.705 D	-1.017 C	27.132	1444.4
102.0	102.30	33.716 D	-1.001 C	27.141	1444.5
103.0	103.45	33.727 D	-0.984 C	27.149	1444.7
104.0	104.40	33.737 D	-0.961 C	27.156	1444.8
105.0	105.40	33.753 D	-0.925 C	27.168	1445.0
106.0	106.30	33.763 D	-0.907 C	27.176	1445.1
107.0	107.50	33.775 D	-0.900 C	27.185	1445.2
108.0	108.45	33.784 D	-0.882 C	27.191	1445.3
109.0	109.50	33.796 D	-0.874 C	27.201	1445.4
110.0	110.55	33.805 D	-0.855 C	27.207	1445.5
111.0	111.55	33.816 D	-0.841 C	27.216	1445.6
112.0	112.45	33.830 D	-0.829 C	27.227	1445.7
113.0	113.40	33.838 D	-0.815 C	27.233	1445.8
114.0	114.65	33.851 D	-0.805 C	27.243	1445.9
115.0	115.70	33.864 D	-0.791 C	27.253	1446.0
116.0	116.55	33.873 D	-0.781 C	27.259	1446.0
117.0	117.55	33.881 D	-0.771 C	27.266	1446.1
118.0	118.65	33.892 D	-0.762 C	27.275	1446.2
119.0	119.55	33.901 D	-0.753 C	27.281	1446.2
120.0	120.50	33.912 D	-0.747 C	27.290	1446.3
121.0	121.70	33.919 D	-0.741 C	27.296	1446.4
122.0	122.75	33.924 D	-0.734 C	27.299	1446.4
123.0	123.65	33.935 D	-0.731 C	27.307	1446.5
124.0	124.70	33.943 D	-0.720 C	27.314	1446.5
125.0	125.75	33.951 D	-0.712 C	27.320	1446.6
126.0	126.80	33.960 D	-0.701 C	27.327	1446.7
127.0	127.65	33.969 D	-0.695 C	27.334	1446.7
128.0	128.65	33.973 D	-0.690 C	27.337	1446.8
129.0	129.80	33.978 D	-0.684 C	27.341	1446.8
130.0	130.75	33.987 D	-0.678 C	27.348	1446.9
131.0	131.65	33.991 D	-0.672 C	27.351	1446.9
132.0	132.75	33.997 D	-0.665 C	27.356	1447.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
133.0	133.85	34.006 D	-0.660 C	27.362	1447.1
134.0	134.95	34.012 D	-0.655 C	27.367	1447.1
135.0	135.85	34.018 D	-0.649 C	27.372	1447.2
136.0	136.70	34.025 D	-0.643 C	27.377	1447.2
137.0	137.90	34.030 D	-0.636 C	27.381	1447.3
138.0	138.95	34.039 D	-0.633 C	27.388	1447.3
139.0	139.90	34.042 D	-0.627 C	27.390	1447.4
140.0	140.90	34.045 D	-0.623 C	27.393	1447.4
141.0	141.80	34.052 D	-0.618 C	27.398	1447.4
142.0	142.90	34.060 D	-0.611 C	27.404	1447.5
143.0	144.00	34.065 D	-0.605 C	27.408	1447.6
144.0	144.95	34.074 D	-0.598 C	27.415	1447.6
145.0	146.10	34.080 D	-0.591 C	27.420	1447.7
146.0	146.85	34.087 D	-0.586 C	27.425	1447.7
147.0	148.00	34.092 D	-0.582 C	27.429	1447.8
148.0	149.00	34.098 D	-0.579 C	27.434	1447.8
149.0	150.10	34.102 D	-0.575 C	27.436	1447.9
150.0	151.10	34.105 D	-0.571 C	27.439	1447.9
151.0	152.00	34.111 D	-0.566 C	27.443	1447.9
152.0	152.95	34.114 D	-0.562 C	27.446	1448.0
153.0	154.10	34.122 D	-0.555 C	27.452	1448.0
154.0	155.00	34.126 D	-0.549 C	27.455	1448.1
155.0	156.10	34.133 D	-0.543 C	27.460	1448.1
156.0	157.15	34.139 D	-0.536 C	27.465	1448.2
157.0	158.25	34.148 D	-0.528 C	27.472	1448.3
158.0	159.25	34.155 D	-0.518 C	27.477	1448.3
159.0	160.15	34.166 D	-0.510 C	27.485	1448.4
160.0	161.05	34.176 D	-0.505 C	27.493	1448.5
161.0	162.05	34.179 D	-0.502 C	27.496	1448.5
162.0	163.10	34.184 D	-0.498 C	27.499	1448.5
163.0	164.15	34.189 D	-0.493 C	27.503	1448.6
164.0	165.20	34.197 D	-0.485 C	27.509	1448.6
165.0	166.25	34.202 D	-0.476 C	27.513	1448.7
166.0	167.30	34.208 D	-0.467 C	27.518	1448.8
167.0	168.30	34.220 D	-0.462 C	27.527	1448.8
168.0	169.35	34.227 D	-0.454 C	27.533	1448.9
169.0	170.45	34.238 D	-0.444 C	27.541	1449.0
170.0	171.45	34.251 D	-0.434 C	27.551	1449.1
171.0	172.30	34.261 D	-0.423 C	27.559	1449.1
172.0	173.30	34.269 D	-0.414 C	27.565	1449.2
173.0	174.25	34.277 D	-0.404 C	27.571	1449.3
174.0	175.25	34.285 D	-0.398 C	27.576	1449.3
175.0	176.45	34.287 D	-0.391 C	27.578	1449.4
176.0	177.55	34.298 D	-0.383 C	27.587	1449.5
177.0	178.45	34.308 D	-0.376 C	27.595	1449.5
178.0	179.30	34.316 D	-0.369 C	27.600	1449.6
179.0	180.40	34.325 D	-0.357 C	27.607	1449.7
180.0	181.55	34.333 D	-0.350 C	27.614	1449.7
181.0	182.55	34.342 D	-0.339 C	27.620	1449.8
182.0	183.35	34.348 D	-0.330 C	27.625	1449.9
183.0	184.50	34.358 D	-0.320 C	27.632	1450.0
184.0	185.55	34.370 D	-0.313 C	27.641	1450.0
185.0	186.55	34.377 D	-0.306 C	27.647	1450.1
186.0	187.70	34.384 D	-0.295 C	27.652	1450.2
187.0	188.45	34.390 D	-0.291 C	27.657	1450.2
188.0	189.55	34.395 D	-0.282 C	27.661	1450.3
189.0	190.55	34.403 D	-0.275 C	27.666	1450.3
190.0	191.60	34.411 D	-0.269 C	27.673	1450.4
191.0	192.75	34.418 D	-0.263 C	27.678	1450.4
192.0	193.55	34.426 D	-0.251 C	27.684	1450.5
193.0	194.65	34.437 D	-0.240 C	27.692	1450.6
194.0	195.55	34.445 D	-0.231 C	27.698	1450.7
195.0	196.70	34.452 D	-0.224 C	27.704	1450.7
196.0	197.70	34.458 D	-0.215 C	27.708	1450.8
197.0	198.70	34.468 D	-0.204 C	27.716	1450.9
198.0	199.80	34.473 D	-0.201 C	27.719	1450.9
199.0	200.65	34.476 D	-0.195 C	27.721	1451.0
200.0	201.65	34.479 D	-0.192 C	27.724	1451.0
201.0	202.75	34.483 D	-0.186 C	27.727	1451.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
271.0	273.90	34.614 D	-0.052 C	27.826	1453.0
272.0	274.80	34.616 D	-0.052 C	27.828	1453.0
273.0	275.90	34.615 D	-0.050 C	27.827	1453.1
274.0	276.85	34.616 D	-0.050 C	27.827	1453.1
275.0	277.85	34.618 D	-0.050 C	27.829	1453.1
276.0	278.95	34.617 D	-0.048 C	27.828	1453.1
277.0	279.80	34.618 D	-0.047 C	27.829	1453.1
278.0	280.80	34.620 D	-0.047 C	27.831	1453.2
279.0	281.85	34.619 D	-0.047 C	27.830	1453.2
280.0	282.95	34.619 D	-0.045 C	27.830	1453.2
281.0	284.00	34.619 D	-0.044 C	27.830	1453.2
282.0	284.95	34.620 D	-0.043 C	27.831	1453.2
283.0	285.90	34.619 D	-0.041 C	27.829	1453.3
284.0	286.90	34.621 D	-0.041 C	27.831	1453.3
285.0	288.00	34.622 D	-0.040 C	27.832	1453.3
286.0	289.05	34.623 D	-0.041 C	27.832	1453.3
287.0	290.15	34.623 D	-0.041 C	27.833	1453.3
288.0	291.10	34.623 D	-0.040 C	27.833	1453.4
289.0	292.05	34.625 D	-0.041 C	27.834	1453.4
290.0	293.00	34.625 D	-0.039 C	27.834	1453.4
291.0	293.95	34.625 D	-0.038 C	27.834	1453.4
292.0	295.10	34.625 D	-0.037 C	27.834	1453.4
293.0	296.25	34.625 D	-0.038 C	27.834	1453.5
294.0	297.15	34.625 D	-0.037 C	27.834	1453.5
295.0	298.20	34.626 D	-0.037 C	27.835	1453.5
296.0	299.20	34.628 D	-0.038 C	27.836	1453.5
297.0	300.10	34.626 D	-0.036 C	27.835	1453.5
298.0	301.25	34.626 D	-0.034 C	27.835	1453.6
299.0	302.10	34.629 D	-0.034 C	27.837	1453.6
300.0	303.30	34.627 D	-0.033 C	27.835	1453.6
301.0	304.25	34.629 D	-0.034 C	27.837	1453.6
302.0	305.35	34.627 D	-0.033 C	27.835	1453.6
303.0	306.15	34.628 D	-0.033 C	27.836	1453.6
304.0	307.30	34.629 D	-0.033 C	27.837	1453.7
305.0	308.35	34.627 D	-0.032 C	27.835	1453.7
306.0	309.25	34.629 D	-0.032 C	27.837	1453.7
307.0	310.25	34.630 D	-0.031 C	27.838	1453.7
308.0	311.40	34.629 D	-0.030 C	27.837	1453.7
309.0	312.25	34.629 D	-0.028 C	27.837	1453.8
310.0	313.25	34.629 D	-0.029 C	27.837	1453.8
311.0	314.40	34.630 D	-0.028 C	27.838	1453.8
312.0	315.40	34.629 D	-0.027 C	27.836	1453.8
313.0	316.50	34.629 D	-0.027 C	27.837	1453.8
314.0	317.50	34.631 D	-0.029 C	27.839	1453.9
315.0	318.40	34.630 D	-0.027 C	27.837	1453.9
316.0	319.50	34.632 D	-0.027 C	27.839	1453.9
317.0	320.50	34.630 D	-0.025 C	27.838	1453.9
318.0	321.55	34.632 D	-0.027 C	27.839	1453.9
319.0	322.35	34.631 D	-0.025 C	27.838	1453.9
320.0	323.50	34.632 D	-0.025 C	27.839	1454.0
321.0	324.65	34.631 D	-0.025 C	27.838	1454.0
322.0	325.55	34.631 D	-0.023 C	27.838	1454.0
323.0	326.65	34.630 D	-0.023 C	27.838	1454.0
324.0	327.50	34.632 D	-0.024 C	27.839	1454.0
325.0	328.55	34.633 D	-0.024 C	27.840	1454.1
326.0	329.65	34.633 D	-0.023 C	27.840	1454.1
327.0	330.60	34.631 D	-0.022 C	27.838	1454.1
328.0	331.65	34.634 D	-0.024 C	27.841	1454.1
329.0	332.55	34.631 D	-0.023 C	27.838	1454.1
330.0	333.50	34.633 D	-0.023 C	27.840	1454.1
331.0	334.70	34.634 D	-0.023 C	27.841	1454.2
332.0	335.75	34.634 D	-0.022 C	27.840	1454.2
333.0	336.75	34.632 D	-0.021 C	27.839	1454.2
334.0	337.85	34.633 D	-0.021 C	27.840	1454.2
335.0	338.75	34.634 D	-0.021 C	27.840	1454.2
336.0	339.65	34.632 D	-0.020 C	27.839	1454.3
337.0	340.60	34.633 D	-0.020 C	27.840	1454.3
338.0	341.70	34.635 D	-0.021 C	27.841	1454.3
339.0	342.80	34.633 D	-0.019 C	27.840	1454.3

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
340.0	343.90	34.634 D	-0.020 C	27.840	1454.3
341.0	344.90	34.635 D	-0.019 C	27.841	1454.4
342.0	345.95	34.632 D	-0.017 C	27.839	1454.4
343.0	346.95	34.633 D	-0.017 C	27.840	1454.4
344.0	347.95	34.633 D	-0.016 C	27.839	1454.4
345.0	348.95	34.632 D	-0.016 C	27.839	1454.4
346.0	349.90	34.633 D	-0.017 C	27.839	1454.4
347.0	350.80	34.634 D	-0.017 C	27.840	1454.5
348.0	351.80	34.634 D	-0.017 C	27.841	1454.5
349.0	352.95	34.632 D	-0.015 C	27.838	1454.5
350.0	353.90	34.635 D	-0.017 C	27.841	1454.5
351.0	354.85	34.633 D	-0.015 C	27.840	1454.5
352.0	355.95	34.634 D	-0.015 C	27.840	1454.6
353.0	356.90	34.633 D	-0.015 C	27.840	1454.6
354.0	358.05	34.633 D	-0.014 C	27.839	1454.6
355.0	358.90	34.634 D	-0.014 C	27.840	1454.6
356.0	359.90	34.635 D	-0.014 C	27.841	1454.6
357.0	361.10	34.633 D	-0.013 C	27.839	1454.6
358.0	361.95	34.633 D	-0.012 C	27.839	1454.7
359.0	362.95	34.634 D	-0.012 C	27.840	1454.7
360.0	364.15	34.632 D	-0.011 C	27.838	1454.7
361.0	365.15	34.632 D	-0.010 C	27.838	1454.7
362.0	366.10	34.632 D	-0.010 C	27.839	1454.7
363.0	367.10	34.633 D	-0.010 C	27.839	1454.8
364.0	368.15	34.634 D	-0.010 C	27.840	1454.8
365.0	369.25	34.635 D	-0.011 C	27.841	1454.8
366.0	370.25	34.634 D	-0.011 C	27.840	1454.8
367.0	371.30	34.636 D	-0.012 C	27.842	1454.8
368.0	372.35	34.633 D	-0.010 C	27.839	1454.8
369.0	373.20	34.633 D	-0.009 C	27.839	1454.9
370.0	374.20	34.634 D	-0.009 C	27.840	1454.9
371.0	375.20	34.633 D	-0.009 C	27.839	1454.9
372.0	376.30	34.633 D	-0.009 C	27.839	1454.9
373.0	377.30	34.635 D	-0.009 C	27.841	1454.9
374.0	378.25	34.634 D	-0.008 C	27.840	1454.9
375.0	379.40	34.635 D	-0.008 C	27.841	1455.0
376.0	380.50	34.634 D	-0.009 C	27.840	1455.0
377.0	381.45	34.634 D	-0.008 C	27.840	1455.0
378.0	382.45	34.634 D	-0.007 C	27.840	1455.0
379.0	383.30	34.633 D	-0.007 C	27.839	1455.0
380.0	384.25	34.634 D	-0.007 C	27.840	1455.1
381.0	385.25	34.634 D	-0.006 C	27.840	1455.1
382.0	386.35	34.632 D	-0.005 C	27.838	1455.1
383.0	387.40	34.634 D	-0.007 C	27.840	1455.1
384.0	388.45	34.633 D	-0.006 C	27.839	1455.1
385.0	389.50	34.635 D	-0.007 C	27.841	1455.1
386.0	390.55	34.635 D	-0.007 C	27.840	1455.2
387.0	391.60	34.634 D	-0.006 C	27.840	1455.2
388.0	392.65	34.634 D	-0.006 C	27.840	1455.2
389.0	393.65	34.635 D	-0.006 C	27.840	1455.2
390.0	394.55	34.636 D	-0.006 C	27.841	1455.2
391.0	395.45	34.633 D	-0.004 C	27.839	1455.2
392.0	396.45	34.633 D	-0.005 C	27.839	1455.3
393.0	397.45	34.633 D	-0.004 C	27.839	1455.3
394.0	398.50	34.634 D	-0.005 C	27.839	1455.3
395.0	399.70	34.633 D	-0.004 C	27.839	1455.3
396.0	400.65	34.634 D	-0.004 C	27.840	1455.3
397.0	401.75	34.635 D	-0.004 C	27.840	1455.4
398.0	402.75	34.634 D	-0.004 C	27.840	1455.4
399.0	403.60	34.634 D	-0.003 C	27.840	1455.4
400.0	404.60	34.636 D	-0.004 C	27.841	1455.4
401.0	405.75	34.635 D	-0.004 C	27.841	1455.4
402.0	406.75	34.635 D	-0.004 C	27.840	1455.4
403.0	407.75	34.633 D	-0.002 C	27.839	1455.5
404.0	408.85	34.635 D	-0.003 C	27.841	1455.5
405.0	409.90	34.635 D	-0.003 C	27.840	1455.5
406.0	410.80	34.636 D	-0.003 C	27.841	1455.5
407.0	411.70	34.635 D	-0.003 C	27.840	1455.5
408.0	412.75	34.635 D	-0.002 C	27.840	1455.5



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
409.0	413.85	34.635 D	-0.003 C	27.841	1455.6
410.0	414.85	34.635 D	-0.002 C	27.840	1455.6
411.0	415.90	34.634 D	-0.002 C	27.840	1455.6
412.0	416.85	34.635 D	-0.003 C	27.840	1455.6
413.0	417.95	34.636 D	-0.003 C	27.841	1455.6
414.0	418.80	34.637 D	-0.003 C	27.842	1455.6
415.0	419.85	34.635 D	-0.002 C	27.840	1455.7
416.0	421.00	34.634 D	-0.001 C	27.840	1455.7
417.0	421.85	34.638 D	-0.003 C	27.843	1455.7
418.0	422.95	34.634 D	-0.002 C	27.840	1455.7
419.0	424.05	34.635 D	-0.001 C	27.841	1455.7
420.0	425.10	34.636 D	-0.002 C	27.841	1455.7
421.0	426.10	34.635 D	0.001 C	27.840	1455.8
422.0	426.95	34.636 D	0.0 C	27.841	1455.8
423.0	428.00	34.636 D	0.0 C	27.841	1455.8
424.0	429.10	34.635 D	0.001 C	27.840	1455.8
425.0	430.05	34.637 D	0.001 C	27.842	1455.8
426.0	430.95	34.634 D	0.002 C	27.839	1455.9
427.0	432.05	34.635 D	0.002 C	27.840	1455.9
428.0	433.20	34.635 D	0.0 C	27.840	1455.9
429.0	434.20	34.636 D	0.0 C	27.841	1455.9
430.0	435.20	34.636 D	-0.001 C	27.841	1455.9
431.0	436.15	34.636 D	0.0 C	27.841	1455.9
432.0	437.05	34.636 D	0.001 C	27.841	1456.0
433.0	438.25	34.636 D	0.0 C	27.841	1456.0
434.0	439.20	34.636 D	0.001 C	27.841	1456.0
435.0	440.30	34.634 D	0.002 C	27.839	1456.0
436.0	441.30	34.635 D	0.003 C	27.840	1456.0
437.0	442.20	34.637 D	0.003 C	27.842	1456.1
438.0	443.30	34.637 D	0.003 C	27.842	1456.1
439.0	444.15	34.638 D	0.003 C	27.842	1456.1
440.0	445.25	34.636 D	0.003 C	27.841	1456.1
441.0	446.30	34.635 D	0.003 C	27.840	1456.1
442.0	447.25	34.636 D	0.003 C	27.841	1456.1
443.0	448.35	34.636 D	0.002 C	27.841	1456.1
444.0	449.30	34.636 D	0.003 C	27.841	1456.2
445.0	450.30	34.636 D	0.003 C	27.841	1456.2
446.0	451.45	34.635 D	0.003 C	27.840	1456.2
447.0	452.35	34.636 D	0.003 C	27.841	1456.2
448.0	453.50	34.635 D	0.003 C	27.840	1456.2
449.0	454.50	34.636 D	0.002 C	27.841	1456.3
450.0	455.50	34.635 D	0.003 C	27.840	1456.3
451.0	456.40	34.636 D	0.003 C	27.841	1456.3
452.0	457.45	34.636 D	0.003 C	27.841	1456.3
453.0	458.55	34.636 D	0.002 C	27.841	1456.3
454.0	459.35	34.637 D	0.003 C	27.842	1456.3
455.0	460.60	34.638 D	0.002 C	27.842	1456.4
456.0	461.40	34.638 D	0.003 C	27.842	1456.4
457.0	462.70	34.637 D	0.003 C	27.842	1456.4
458.0	463.40	34.638 D	0.003 C	27.843	1456.4
459.0	464.70	34.637 D	0.003 C	27.842	1456.4
460.0	465.45	34.637 D	0.004 C	27.842	1456.4



TEMPERATURE, C

△ -2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00

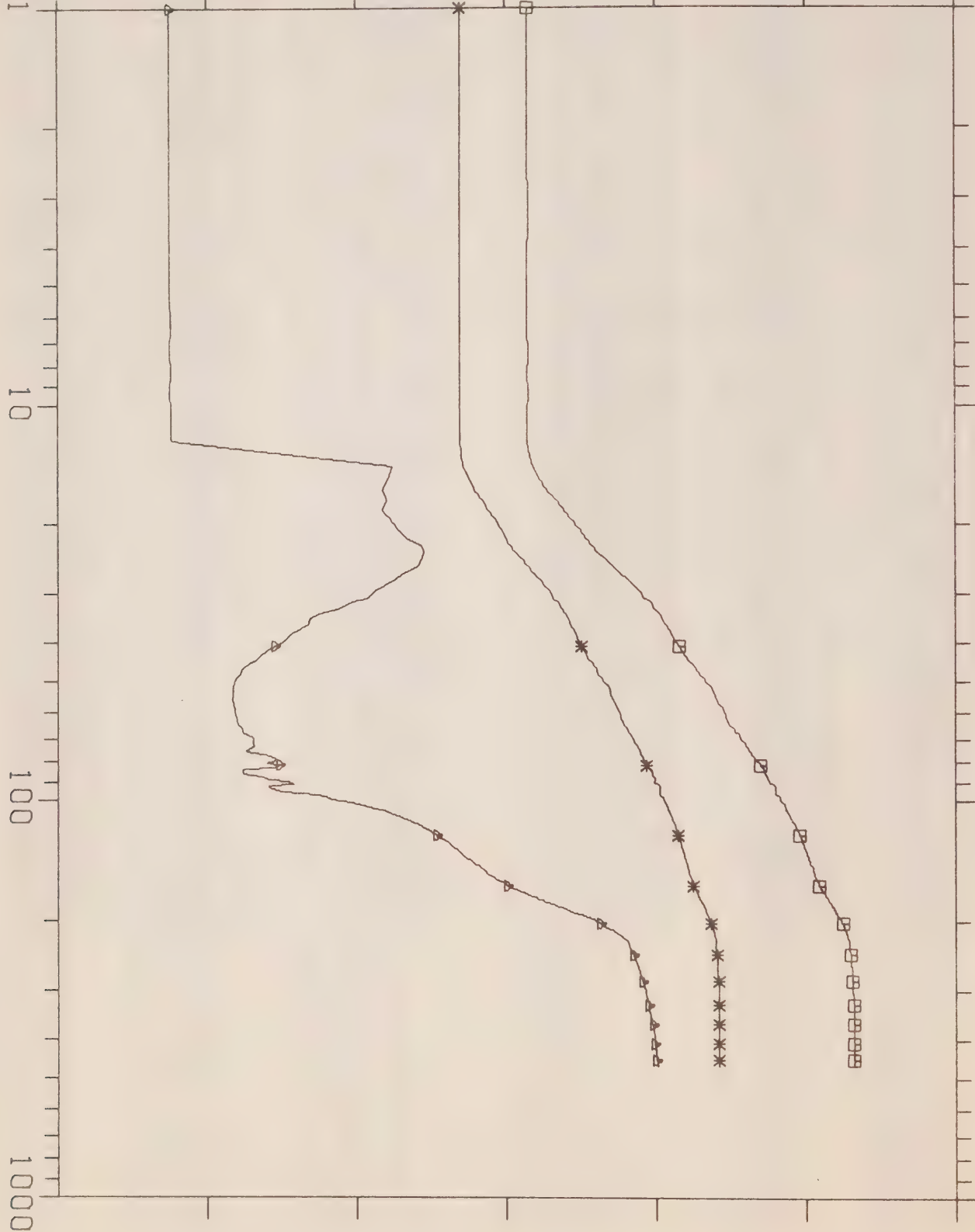
SALINITY 0/00

□ 24.00 26.00 28.00 30.00 32.00 34.00 36.00

SIGMAT

\* 19.00 21.00 23.00 25.00 27.00 29.00 31.00

DEPTH M



CRUISE 15-76-015

C'IBERVILLE FIORD-76

EXPER NO. 2012

LAT N.80-34-45

LONG W.79-29-00

WATER DEPTH 495

DEPTH INCR.

DATE 090376

LOCAL TIME 1140

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
2.0	0.10	30.307 E	-1.624 D	24.396	1435.2
3.0	1.35	30.310 E	-1.625 D	24.399	1435.2
4.0	2.25	30.309 E	-1.625 D	24.398	1435.2
5.0	3.25	30.310 E	-1.625 D	24.399	1435.2
6.0	4.45	30.309 E	-1.624 D	24.398	1435.2
7.0	5.35	30.310 E	-1.624 D	24.399	1435.2
8.0	6.30	30.307 E	-1.622 D	24.397	1435.3
9.0	7.45	30.310 E	-1.624 D	24.399	1435.3
10.0	8.30	30.308 E	-1.622 D	24.397	1435.3
11.0	9.25	30.310 E	-1.624 D	24.399	1435.3
12.0	10.35	30.308 E	-1.621 D	24.397	1435.3
13.0	11.30	30.309 E	-1.621 D	24.398	1435.4
14.0	12.35	30.309 E	-1.621 D	24.398	1435.4
15.0	13.50		-1.188 D		
16.0	14.35	30.370 E	-0.877 D	24.433	1439.0
17.0	15.40	30.488 E	-0.889 D	24.528	1439.1
18.0	16.50	30.588 E	-0.909 D	24.610	1439.2
19.0	17.45	30.694 E	-0.896 D	24.695	1439.4
20.0	18.55	30.790 E	-0.909 D	24.773	1439.5
21.0	19.35	30.889 E	-0.885 D	24.852	1439.8
22.0	20.55	30.996 E	-0.859 D	24.938	1440.1
23.0	21.55	31.082 E	-0.828 D	25.006	1440.3
24.0	22.50	31.157 E	-0.779 D	25.066	1440.7
25.0	23.50	31.240 E	-0.772 D	25.133	1440.9
26.0	24.50	31.340 E	-0.774 D	25.213	1441.0
27.0	25.45	31.440 E	-0.789 D	25.294	1441.1
28.0	26.60	31.543 E	-0.841 D	25.379	1441.0
29.0	27.60	31.639 E	-0.867 D	25.458	1441.0
30.0	28.45	31.723 E	-0.899 D	25.526	1441.0
31.0	29.45	31.807 E	-0.933 D	25.595	1441.0
32.0	30.70	31.857 E	-0.959 D	25.636	1441.0
33.0	31.45	31.939 E	-1.011 D	25.704	1440.8
34.0	32.60	32.004 E	-1.058 D	25.758	1440.7
35.0	33.60	32.063 E	-1.114 D	25.807	1440.6
36.0	34.50	32.106 E	-1.150 D	25.842	1440.5
37.0	35.70	32.137 E	-1.153 D	25.868	1440.5
38.0	36.60	32.179 E	-1.178 D	25.903	1440.5
39.0	37.50	32.221 E	-1.208 D	25.938	1440.4
40.0	38.65	32.247 E	-1.227 D	25.959	1440.4
41.0	39.70	32.273 E	-1.241 D	25.980	1440.4
42.0	40.60	32.323 E	-1.270 D	26.021	1440.3
43.0	41.70	32.365 E	-1.295 D	26.056	1440.3
44.0	42.80	32.406 E	-1.317 D	26.090	1440.2
45.0	43.75	32.449 E	-1.329 D	26.125	1440.3
46.0	44.70	32.487 E	-1.350 D	26.157	1440.2
47.0	45.80	32.537 E	-1.368 D	26.197	1440.2
48.0	46.70	32.569 E	-1.378 D	26.224	1440.3
49.0	47.80	32.601 E	-1.385 D	26.250	1440.3
50.0	48.85	32.637 E	-1.394 D	26.279	1440.3
51.0	49.85	32.685 E	-1.403 D	26.318	1440.3
52.0	50.80	32.730 E	-1.407 D	26.354	1440.4
53.0	51.70	32.760 E	-1.410 D	26.379	1440.5
54.0	52.85	32.776 E	-1.410 D	26.392	1440.5
55.0	53.95	32.797 E	-1.412 D	26.409	1440.5
56.0	54.85	32.823 E	-1.411 D	26.430	1440.6
57.0	55.85	32.847 E	-1.413 D	26.449	1440.6
58.0	56.90	32.868 E	-1.410 D	26.466	1440.7
59.0	57.85	32.895 E	-1.410 D	26.489	1440.7
60.0	59.05	32.919 E	-1.405 D	26.507	1440.8
61.0	59.90	32.933 E	-1.405 D	26.519	1440.9
62.0	60.85	32.948 E	-1.404 D	26.531	1440.9
63.0	61.85	32.958 E	-1.402 D	26.539	1440.9

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
64.0	62.95	32.982 E	-1.399 D	26.558	1441.0
65.0	64.05	33.003 E	-1.393 D	26.575	1441.1
66.0	65.00	33.028 E	-1.388 D	26.595	1441.2
67.0	66.00	33.052 E	-1.382 D	26.614	1441.2
68.0	66.95	33.088 E	-1.378 D	26.644	1441.3
69.0	67.90	33.118 E	-1.370 D	26.668	1441.4
70.0	68.95	33.138 E	-1.352 D	26.683	1441.5
71.0	70.05	33.161 E	-1.339 D	26.702	1441.7
72.0	71.15	33.192 E	-1.346 D	26.727	1441.7
73.0	72.10	33.207 E	-1.343 D	26.739	1441.7
74.0	73.15	33.236 E	-1.342 D	26.763	1441.8
75.0	74.15	33.255 E	-1.365 D	26.779	1441.7
76.0	75.10	33.274 E	-1.372 D	26.794	1441.7
77.0	76.30	33.280 E	-1.311 D	26.797	1442.1
78.0	77.05	33.313 E	-1.287 D	26.823	1442.2
79.0	78.25	33.326 E	-1.270 D	26.833	1442.3
80.0	79.10	33.360 E	-1.267 D	26.861	1442.4
81.0	80.15	33.394 E	-1.302 D	26.889	1442.3
82.0	81.05	33.396 E	-1.257 D	26.890	1442.5
83.0	82.25	33.433 E	-1.271 D	26.920	1442.6
84.0	83.10	33.448 E	-1.375 D	26.935	1442.1
85.0	84.25	33.460 E	-1.378 D	26.945	1442.1
86.0	85.30	33.473 E	-1.380 D	26.956	1442.1
87.0	86.15	33.482 E	-1.351 D	26.962	1442.3
88.0	87.15	33.503 E	-1.308 D	26.977	1442.6
89.0	88.15	33.522 E	-1.289 D	26.993	1442.7
90.0	89.30	33.520 E	-1.223 D	26.989	1443.0
91.0	90.30	33.586 E	-1.206 D	27.042	1443.2
92.0	91.30	33.594 E	-1.292 D	27.051	1442.8
93.0	92.25	33.599 E	-1.294 D	27.055	1442.8
94.0	93.30	33.600 E	-1.282 D	27.055	1442.9
95.0	94.35	33.602 E	-1.252 D	27.056	1443.1
96.0	95.40	33.600 E	-1.178 D	27.052	1443.4
97.0	96.45	33.623 E	-1.130 D	27.070	1443.7
98.0	97.50	33.651 E	-1.104 D	27.091	1443.9
99.0	98.45	33.668 E	-1.082 D	27.105	1444.0
100.0	99.45	33.680 E	-1.048 D	27.113	1444.2
101.0	100.45	33.701 D	-1.013 C	27.129	1444.4
102.0	101.45	33.712 D	-0.997 C	27.137	1444.5
103.0	102.35	33.723 D	-0.975 C	27.146	1444.7
104.0	103.40	33.735 D	-0.953 C	27.154	1444.8
105.0	104.60	33.745 D	-0.922 C	27.161	1445.0
106.0	105.40	33.759 D	-0.903 C	27.172	1445.1
107.0	106.45	33.771 D	-0.889 C	27.181	1445.2
108.0	107.45	33.785 D	-0.872 C	27.192	1445.3
109.0	108.45	33.792 D	-0.862 C	27.197	1445.4
110.0	109.50	33.809 D	-0.845 C	27.210	1445.5
111.0	110.50	33.820 D	-0.835 C	27.219	1445.6
112.0	111.55	33.828 D	-0.820 C	27.224	1445.7
113.0	112.70	33.840 D	-0.811 C	27.234	1445.8
114.0	113.80	33.854 D	-0.799 C	27.245	1445.9
115.0	114.75	33.864 D	-0.787 C	27.253	1446.0
116.0	115.70	33.874 D	-0.778 C	27.260	1446.0
117.0	116.80	33.883 D	-0.768 C	27.267	1446.1
118.0	117.65	33.895 D	-0.761 C	27.276	1446.2
119.0	118.65	33.901 D	-0.750 C	27.281	1446.2
120.0	119.70	33.911 D	-0.744 C	27.289	1446.3
121.0	120.70	33.915 D	-0.737 C	27.292	1446.4
122.0	121.80	33.927 D	-0.732 C	27.301	1446.4
123.0	122.90	33.936 D	-0.729 C	27.308	1446.5
124.0	123.85	33.944 D	-0.715 C	27.315	1446.6
125.0	124.75	33.953 D	-0.707 C	27.322	1446.6
126.0	125.85	33.963 D	-0.697 C	27.329	1446.7
127.0	126.80	33.969 D	-0.691 C	27.334	1446.7
128.0	127.80	33.977 D	-0.686 C	27.340	1446.8
129.0	128.90	33.983 D	-0.681 C	27.344	1446.8
130.0	129.95	33.990 D	-0.676 C	27.350	1446.9
131.0	130.90	33.995 D	-0.671 C	27.354	1446.9
132.0	131.95	34.002 D	-0.665 C	27.359	1447.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
133.0	133.10	34.007 D	-0.660 C	27.364	1447.0
134.0	134.00	34.014 D	-0.655 C	27.369	1447.1
135.0	134.95	34.020 D	-0.650 C	27.373	1447.1
136.0	135.85	34.026 D	-0.643 C	27.378	1447.2
137.0	136.90	34.033 D	-0.638 C	27.383	1447.2
138.0	138.05	34.038 D	-0.633 C	27.387	1447.3
139.0	139.05	34.044 D	-0.627 C	27.392	1447.3
140.0	139.90	34.048 D	-0.621 C	27.395	1447.4
141.0	141.00	34.054 D	-0.615 C	27.399	1447.5
142.0	142.15	34.064 D	-0.611 C	27.408	1447.5
143.0	142.95	34.068 D	-0.603 C	27.410	1447.6
144.0	144.15	34.076 D	-0.597 C	27.417	1447.6
145.0	145.10	34.084 D	-0.590 C	27.423	1447.7
146.0	146.20	34.090 D	-0.586 C	27.428	1447.7
147.0	147.05	34.093 D	-0.580 C	27.430	1447.8
148.0	148.20	34.098 D	-0.577 C	27.433	1447.8
149.0	149.20	34.105 D	-0.572 C	27.439	1447.9
150.0	150.15	34.107 D	-0.567 C	27.440	1447.9
151.0	151.20	34.115 D	-0.563 C	27.447	1447.9
152.0	152.10	34.119 D	-0.558 C	27.450	1448.0
153.0	153.30	34.126 D	-0.552 C	27.455	1448.0
154.0	154.35	34.135 D	-0.546 C	27.462	1448.1
155.0	155.30	34.140 D	-0.540 C	27.466	1448.2
156.0	156.40	34.145 D	-0.533 C	27.473	1448.2
157.0	157.30	34.155 D	-0.523 C	27.477	1448.3
158.0	158.30	34.165 D	-0.513 C	27.484	1448.4
159.0	159.30	34.174 D	-0.508 C	27.492	1448.4
160.0	160.20	34.180 D	-0.505 C	27.497	1448.5
161.0	161.35	34.181 D	-0.500 C	27.497	1448.5
162.0	162.45	34.186 D	-0.496 C	27.501	1448.5
163.0	163.40	34.195 D	-0.489 C	27.508	1448.6
164.0	164.35	34.201 D	-0.479 C	27.512	1448.7
165.0	165.45	34.209 D	-0.472 C	27.519	1448.7
166.0	166.40	34.218 D	-0.467 C	27.525	1448.8
167.0	167.55	34.227 D	-0.455 C	27.532	1448.9
168.0	168.50	34.237 D	-0.447 C	27.540	1448.9
169.0	169.40	34.244 D	-0.441 C	27.546	1449.0
170.0	170.40	34.254 D	-0.428 C	27.553	1449.1
171.0	171.40	34.264 D	-0.420 C	27.561	1449.1
172.0	172.55	34.274 D	-0.410 C	27.568	1449.2
173.0	173.50	34.284 D	-0.402 C	27.576	1449.3
174.0	174.65	34.293 D	-0.396 C	27.583	1449.3
175.0	175.65	34.298 D	-0.388 C	27.586	1449.4
176.0	176.60	34.304 D	-0.376 C	27.591	1449.5
177.0	177.75	34.314 D	-0.376 C	27.600	1449.5
178.0	178.65	34.321 D	-0.366 C	27.605	1449.6
179.0	179.70	34.332 D	-0.354 C	27.612	1449.7
180.0	180.60	34.340 D	-0.344 C	27.619	1449.8
181.0	181.55	34.348 D	-0.338 C	27.625	1449.8
182.0	182.70	34.355 D	-0.329 C	27.630	1449.9
183.0	183.65	34.362 D	-0.319 C	27.635	1449.9
184.0	184.80	34.373 D	-0.308 C	27.644	1450.0
185.0	185.65	34.383 D	-0.302 C	27.652	1450.1
186.0	186.65	34.388 D	-0.294 C	27.655	1450.1
187.0	187.80	34.395 D	-0.290 C	27.661	1450.2
188.0	188.85	34.395 D	-0.282 C	27.663	1450.3
189.0	189.80	34.407 D	-0.275 C	27.670	1450.3
190.0	190.65	34.411 D	-0.265 C	27.673	1450.4
191.0	191.95	34.424 D	-0.256 C	27.682	1450.5
192.0	192.70	34.429 D	-0.246 C	27.686	1450.5
193.0	193.90	34.437 D	-0.235 C	27.692	1450.6
194.0	194.80	34.449 D	-0.227 C	27.702	1450.7
195.0	195.85	34.454 D	-0.218 C	27.705	1450.7
196.0	196.85	34.462 D	-0.214 C	27.711	1450.8
197.0	197.90	34.471 D	-0.203 C	27.718	1450.9
198.0	198.85	34.475 D	-0.200 C	27.721	1450.9
199.0	200.00	34.485 D	-0.194 C	27.729	1451.0
200.0	200.90	34.490 D	-0.191 C	27.732	1451.0
201.0	202.05	34.487 D	-0.187 C	27.730	1451.0

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
202.0	203.00	34.495 D	-0.183 C	27.736	1451.1
203.0	204.00	34.503 D	-0.178 C	27.743	1451.1
204.0	205.10	34.508 D	-0.174 C	27.746	1451.2
205.0	206.00	34.512 D	-0.169 C	27.749	1451.2
206.0	207.05	34.516 D	-0.163 C	27.752	1451.3
207.0	208.15	34.522 D	-0.160 C	27.757	1451.3
208.0	209.10	34.523 D	-0.154 C	27.758	1451.3
209.0	210.10	34.529 D	-0.147 C	27.762	1451.4
210.0	211.05	34.534 D	-0.142 C	27.766	1451.5
211.0	212.30	34.541 D	-0.136 C	27.771	1451.5
212.0	213.20	34.544 D	-0.130 C	27.773	1451.6
213.0	214.25	34.547 D	-0.127 C	27.775	1451.6
214.0	215.05	34.550 D	-0.123 C	27.778	1451.6
215.0	216.25	34.554 D	-0.119 C	27.781	1451.7
216.0	217.05	34.557 D	-0.116 C	27.783	1451.7
217.0	218.25	34.560 D	-0.113 C	27.785	1451.7
218.0	219.15	34.564 D	-0.108 C	27.788	1451.8
219.0	220.15	34.568 D	-0.106 C	27.792	1451.8
220.0	221.25	34.568 D	-0.103 C	27.792	1451.8
221.0	222.20	34.570 D	-0.100 C	27.793	1451.9
222.0	223.40	34.574 D	-0.098 C	27.796	1451.9
223.0	224.40	34.577 D	-0.096 C	27.798	1451.9
224.0	225.25	34.580 D	-0.094 C	27.801	1452.0
225.0	226.35	34.580 D	-0.093 C	27.800	1452.0
226.0	227.30	34.580 D	-0.092 C	27.800	1452.0
227.0	228.45	34.584 D	-0.094 C	27.804	1452.0
228.0	229.35	34.580 D	-0.090 C	27.801	1452.1
229.0	230.35	34.581 D	-0.090 C	27.801	1452.1
230.0	231.55	34.584 D	-0.091 C	27.804	1452.1
231.0	232.30	34.583 D	-0.089 C	27.803	1452.1
232.0	233.50	34.585 D	-0.087 C	27.804	1452.1
233.0	234.50	34.585 D	-0.085 C	27.804	1452.2
234.0	235.40	34.587 D	-0.084 C	27.806	1452.2
235.0	236.45	34.590 D	-0.083 C	27.808	1452.2
236.0	237.60	34.591 D	-0.082 C	27.809	1452.2
237.0	238.65	34.592 D	-0.080 C	27.810	1452.3
238.0	239.40	34.593 D	-0.079 C	27.811	1452.3
239.0	240.60	34.594 D	-0.078 C	27.811	1452.3
240.0	241.45	34.593 D	-0.076 C	27.810	1452.3
241.0	242.60	34.596 D	-0.075 C	27.812	1452.4
242.0	243.55	34.595 D	-0.074 C	27.812	1452.4
243.0	244.70	34.598 D	-0.073 C	27.814	1452.4
244.0	245.75	34.600 D	-0.073 C	27.816	1452.4
245.0	246.60	34.600 D	-0.072 C	27.816	1452.4
246.0	247.65	34.601 D	-0.071 C	27.816	1452.5
247.0	248.60	34.600 D	-0.069 C	27.815	1452.5
248.0	249.70	34.603 D	-0.070 C	27.818	1452.5
249.0	250.85	34.604 D	-0.069 C	27.819	1452.5
250.0	251.75	34.604 D	-0.068 C	27.818	1452.6
251.0	252.75	34.605 D	-0.067 C	27.819	1452.6
252.0	253.70	34.603 D	-0.066 C	27.818	1452.6
253.0	254.80	34.604 D	-0.065 C	27.819	1452.6
254.0	255.95	34.605 D	-0.065 C	27.819	1452.6
255.0	256.75	34.608 D	-0.064 C	27.821	1452.7
256.0	257.85	34.607 D	-0.063 C	27.821	1452.7
257.0	258.85	34.607 D	-0.062 C	27.821	1452.7
258.0	259.85	34.610 D	-0.061 C	27.823	1452.7
259.0	260.90	34.611 D	-0.060 C	27.824	1452.8
260.0	261.80	34.610 D	-0.059 C	27.823	1452.8
261.0	262.95	34.614 D	-0.060 C	27.826	1452.8
262.0	263.95	34.612 D	-0.058 C	27.825	1452.8
263.0	264.90	34.612 D	-0.057 C	27.825	1452.8
264.0	266.00	34.614 D	-0.057 C	27.826	1452.9
265.0	266.90	34.614 D	-0.056 C	27.826	1452.9
266.0	268.05	34.615 D	-0.056 C	27.827	1452.9
267.0	269.05	34.615 D	-0.055 C	27.827	1452.9
268.0	270.10	34.614 D	-0.054 C	27.826	1452.9
269.0	270.95	34.617 D	-0.054 C	27.828	1453.0
270.0	272.15	34.616 D	-0.053 C	27.828	1453.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
271.0	272.95	34.616 D	-0.052 C	27.828	1453.0
272.0	274.10	34.618 D	-0.052 C	27.829	1453.0
273.0	275.15	34.618 D	-0.050 C	27.829	1453.0
274.0	276.00	34.619 D	-0.050 C	27.830	1453.1
275.0	277.20	34.618 D	-0.050 C	27.829	1453.1
276.0	278.20	34.617 D	-0.048 C	27.828	1453.1
277.0	279.10	34.620 D	-0.047 C	27.830	1453.1
278.0	280.15	34.622 D	-0.048 C	27.832	1453.1
279.0	281.30	34.623 D	-0.047 C	27.833	1453.2
280.0	282.20	34.621 D	-0.045 C	27.831	1453.2
281.0	283.10	34.622 D	-0.044 C	27.832	1453.2
282.0	284.20	34.623 D	-0.044 C	27.833	1453.2
283.0	285.30	34.623 D	-0.043 C	27.833	1453.2
284.0	286.20	34.625 D	-0.042 C	27.835	1453.3
285.0	287.25	34.625 D	-0.042 C	27.834	1453.3
286.0	288.30	34.625 D	-0.041 C	27.834	1453.3
287.0	289.35	34.625 D	-0.041 C	27.835	1453.3
288.0	290.25	34.626 D	-0.041 C	27.835	1453.3
289.0	291.25	34.625 D	-0.039 C	27.834	1453.4
290.0	292.40	34.626 D	-0.039 C	27.835	1453.4
291.0	293.50	34.625 D	-0.038 C	27.834	1453.4
292.0	294.50	34.628 D	-0.038 C	27.836	1453.4
293.0	295.30	34.627 D	-0.038 C	27.836	1453.4
294.0	296.35	34.627 D	-0.037 C	27.835	1453.5
295.0	297.55	34.627 D	-0.037 C	27.836	1453.5
296.0	298.50	34.628 D	-0.037 C	27.837	1453.5
297.0	299.40	34.627 D	-0.035 C	27.836	1453.5
298.0	300.45	34.628 D	-0.035 C	27.836	1453.5
299.0	301.55	34.627 D	-0.034 C	27.836	1453.6
300.0	302.50	34.629 D	-0.035 C	27.838	1453.6
301.0	303.50	34.630 D	-0.035 C	27.838	1453.6
302.0	304.55	34.629 D	-0.034 C	27.837	1453.6
303.0	305.60	34.631 D	-0.034 C	27.839	1453.6
304.0	306.55	34.631 D	-0.033 C	27.838	1453.7
305.0	307.50	34.630 D	-0.033 C	27.838	1453.7
306.0	308.65	34.631 D	-0.032 C	27.839	1453.7
307.0	309.75	34.633 D	-0.033 C	27.840	1453.7
308.0	310.80	34.630 D	-0.030 C	27.838	1453.7
309.0	311.60	34.630 D	-0.029 C	27.838	1453.8
310.0	312.60	34.631 D	-0.029 C	27.839	1453.8
311.0	313.75	34.631 D	-0.028 C	27.838	1453.8
312.0	314.75	34.633 D	-0.029 C	27.840	1453.8
313.0	315.80	34.633 D	-0.029 C	27.840	1453.8
314.0	316.65	34.633 D	-0.029 C	27.840	1453.8
315.0	317.75	34.633 D	-0.028 C	27.840	1453.9
316.0	318.85	34.632 D	-0.027 C	27.839	1453.9
317.0	319.85	34.632 D	-0.027 C	27.839	1453.9
318.0	320.75	34.633 D	-0.026 C	27.840	1453.9
319.0	321.75	34.632 D	-0.026 C	27.839	1453.9
320.0	322.95	34.634 D	-0.026 C	27.841	1454.0
321.0	324.00	34.635 D	-0.026 C	27.842	1454.0
322.0	324.80	34.635 D	-0.025 C	27.842	1454.0
323.0	325.95	34.633 D	-0.024 C	27.840	1454.0
324.0	326.85	34.635 D	-0.025 C	27.842	1454.0
325.0	327.95	34.632 D	-0.023 C	27.839	1454.1
326.0	329.10	34.635 D	-0.025 C	27.842	1454.1
327.0	329.95	34.635 D	-0.023 C	27.842	1454.1
328.0	330.95	34.635 D	-0.024 C	27.841	1454.1
329.0	331.85	34.634 D	-0.024 C	27.841	1454.1
330.0	333.05	34.634 D	-0.023 C	27.840	1454.1
331.0	334.10	34.636 D	-0.023 C	27.842	1454.2
332.0	335.10	34.634 D	-0.023 C	27.841	1454.2
333.0	335.95	34.636 D	-0.023 C	27.842	1454.2
334.0	337.15	34.634 D	-0.022 C	27.841	1454.2
335.0	337.95	34.637 D	-0.023 C	27.843	1454.2
336.0	339.15	34.635 D	-0.022 C	27.841	1454.2
337.0	340.15	34.636 D	-0.021 C	27.842	1454.3
338.0	341.15	34.634 D	-0.019 C	27.841	1454.3
339.0	342.30	34.636 D	-0.020 C	27.842	1454.3

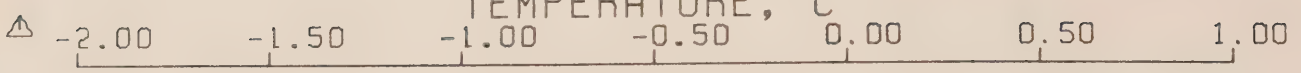


DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
340.0	343.10	34.635 D	-0.019 C	27.841	1454.3
341.0	344.15	34.638 D	-0.020 C	27.844	1454.3
342.0	345.15	34.635 D	-0.018 C	27.841	1454.4
343.0	346.30	34.635 D	-0.018 C	27.841	1454.4
344.0	347.30	34.634 D	-0.017 C	27.841	1454.4
345.0	348.15	34.634 D	-0.016 C	27.840	1454.4
346.0	349.20	34.636 D	-0.018 C	27.842	1454.4
347.0	350.35	34.638 D	-0.019 C	27.843	1454.4
348.0	351.40	34.637 D	-0.018 C	27.843	1454.5
349.0	352.30	34.634 D	-0.016 C	27.841	1454.5
350.0	353.20	34.634 D	-0.015 C	27.840	1454.5
351.0	354.40	34.635 D	-0.016 C	27.841	1454.5
352.0	355.35	34.636 D	-0.016 C	27.842	1454.5
353.0	356.40	34.637 D	-0.015 C	27.842	1454.6
354.0	357.45	34.634 D	-0.013 C	27.840	1454.6
355.0	358.40	34.636 D	-0.014 C	27.842	1454.6
356.0	359.35	34.634 D	-0.013 C	27.840	1454.6
357.0	360.55	34.636 D	-0.014 C	27.842	1454.6
358.0	361.50	34.639 D	-0.016 C	27.844	1454.6
359.0	362.60	34.635 D	-0.013 C	27.841	1454.7
360.0	363.40	34.635 D	-0.012 C	27.841	1454.7
361.0	364.35	34.635 D	-0.011 C	27.841	1454.7
362.0	365.40	34.635 D	-0.012 C	27.841	1454.7
363.0	366.45	34.635 D	-0.011 C	27.841	1454.7
364.0	367.55	34.637 D	-0.012 C	27.842	1454.8
365.0	368.65	34.635 D	-0.011 C	27.841	1454.8
366.0	369.65	34.635 D	-0.012 C	27.841	1454.8
367.0	370.65	34.634 D	-0.010 C	27.840	1454.8
368.0	371.60	34.638 D	-0.011 C	27.843	1454.8
369.0	372.75	34.634 D	-0.010 C	27.840	1454.8
370.0	373.50	34.641 D	-0.014 C	27.846	1454.9
371.0	374.55	34.635 D	-0.009 C	27.841	1454.9
372.0	375.80	34.636 D	-0.009 C	27.841	1454.9
373.0	376.70	34.635 D	-0.009 C	27.841	1454.9
374.0	377.65	34.636 D	-0.009 C	27.842	1454.9
375.0	378.75	34.635 D	-0.009 C	27.841	1455.0
376.0	379.65	34.636 D	-0.009 C	27.842	1455.0
377.0	380.80	34.636 D	-0.008 C	27.841	1455.0
378.0	381.85	34.635 D	-0.008 C	27.841	1455.0
379.0	382.75	34.635 D	-0.008 C	27.840	1455.0
380.0	383.85	34.636 D	-0.008 C	27.841	1455.0
381.0	384.70	34.634 D	-0.007 C	27.840	1455.1
382.0	385.90	34.637 D	-0.009 C	27.842	1455.1
383.0	386.95	34.638 D	-0.008 C	27.843	1455.1
384.0	388.00	34.635 D	-0.007 C	27.840	1455.1
385.0	388.80	34.635 D	-0.006 C	27.840	1455.1
386.0	389.80	34.635 D	-0.006 C	27.841	1455.1
387.0	390.95	34.636 D	-0.007 C	27.841	1455.2
388.0	391.95	34.635 D	-0.007 C	27.841	1455.2
389.0	392.90	34.637 D	-0.006 C	27.842	1455.2
390.0	394.00	34.636 D	-0.006 C	27.841	1455.2
391.0	395.15	34.637 D	-0.006 C	27.842	1455.2
392.0	396.15	34.637 D	-0.007 C	27.842	1455.3
393.0	397.15	34.637 D	-0.006 C	27.842	1455.3
394.0	398.10	34.636 D	-0.006 C	27.842	1455.3
395.0	399.10	34.636 D	-0.005 C	27.841	1455.3
396.0	399.95	34.636 D	-0.005 C	27.841	1455.3
397.0	400.95	34.634 D	-0.003 C	27.840	1455.3
398.0	402.00	34.636 D	-0.005 C	27.841	1455.4
399.0	403.15	34.637 D	-0.005 C	27.842	1455.4
400.0	404.15	34.637 D	-0.005 C	27.842	1455.4
401.0	405.10	34.636 D	-0.004 C	27.841	1455.4
402.0	406.15	34.637 D	-0.004 C	27.842	1455.4
403.0	407.20	34.636 D	-0.004 C	27.841	1455.4
404.0	408.20	34.636 D	-0.003 C	27.841	1455.5
405.0	409.30	34.638 D	-0.004 C	27.843	1455.5
406.0	410.20	34.637 D	-0.004 C	27.842	1455.5
407.0	411.30	34.637 D	-0.003 C	27.842	1455.5
408.0	412.30	34.636 D	-0.003 C	27.841	1455.5

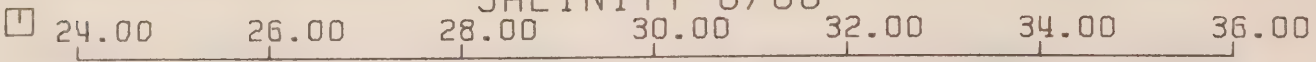
DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
409.0	413.20	34.638 D	-0.003 C	27.843	1455.6
410.0	414.25	34.638 D	-0.003 C	27.843	1455.6
411.0	415.35	34.637 D	-0.003 C	27.842	1455.6
412.0	416.35	34.638 D	-0.003 C	27.843	1455.6
413.0	417.30	34.637 D	-0.003 C	27.842	1455.6
414.0	418.35	34.638 D	-0.003 C	27.843	1455.6
415.0	419.35	34.637 D	-0.002 C	27.842	1455.7
416.0	420.40	34.637 D	-0.003 C	27.842	1455.7
417.0	421.45	34.638 D	-0.003 C	27.843	1455.7
418.0	422.35	34.638 D	-0.002 C	27.842	1455.7
419.0	423.40	34.636 D	0.0 C	27.841	1455.7
420.0	424.50	34.637 D	-0.001 C	27.842	1455.7
421.0	425.45	34.636 D	0.0 C	27.841	1455.8
422.0	426.45	34.636 D	0.002 C	27.841	1455.8
423.0	427.60	34.637 D	0.001 C	27.842	1455.8
424.0	428.50	34.636 D	0.001 C	27.841	1455.8
425.0	429.55	34.638 D	0.0 C	27.843	1455.8
426.0	430.40	34.637 D	0.001 C	27.842	1455.9
427.0	431.50	34.636 D	0.001 C	27.841	1455.9
428.0	432.65	34.639 D	-0.001 C	27.844	1455.9
429.0	433.65	34.640 D	-0.002 C	27.844	1455.9
430.0	434.60	34.637 D	0.0 C	27.842	1455.9
431.0	435.65	34.637 D	-0.001 C	27.842	1455.9
432.0	436.65	34.637 D	0.001 C	27.842	1456.0
433.0	437.70	34.636 D	0.002 C	27.841	1456.0
434.0	438.70	34.639 D	0.0 C	27.843	1456.0
435.0	439.70	34.635 D	0.003 C	27.840	1456.0
436.0	440.70	34.637 D	0.003 C	27.842	1456.0
437.0	441.80	34.638 D	0.003 C	27.842	1456.0
438.0	442.60	34.637 D	0.003 C	27.842	1456.1
439.0	443.65	34.638 D	0.003 C	27.843	1456.1
440.0	444.80	34.636 D	0.003 C	27.841	1456.1
441.0	445.85	34.638 D	0.002 C	27.843	1456.1
442.0	446.80	34.637 D	0.002 C	27.842	1456.1
443.0	447.75	34.637 D	0.003 C	27.842	1456.1
444.0	448.75	34.637 D	0.003 C	27.841	1456.2
445.0	449.85	34.637 D	0.003 C	27.842	1456.2
446.0	450.90	34.637 D	0.003 C	27.841	1456.2
447.0	451.90	34.638 D	0.003 C	27.842	1456.2
448.0	453.00	34.637 D	0.003 C	27.842	1456.2
449.0	453.80	34.636 D	0.003 C	27.841	1456.2
450.0	454.90	34.637 D	0.003 C	27.842	1456.3
451.0	455.90	34.638 D	0.003 C	27.843	1456.3
452.0	456.90	34.637 D	0.003 C	27.842	1456.3
453.0	458.05	34.637 D	0.003 C	27.842	1456.3
454.0	459.05	34.638 D	0.003 C	27.842	1456.3
455.0	459.95	34.639 D	0.003 C	27.843	1456.3
456.0	461.10	34.638 D	0.003 C	27.842	1456.4
457.0	462.00	34.639 D	0.003 C	27.843	1456.4
458.0	463.00	34.637 D	0.004 C	27.842	1456.4
459.0	464.00	34.639 D	0.003 C	27.843	1456.4
460.0	465.20	34.637 D	0.004 C	27.842	1456.4

EXPERIMENT 2013

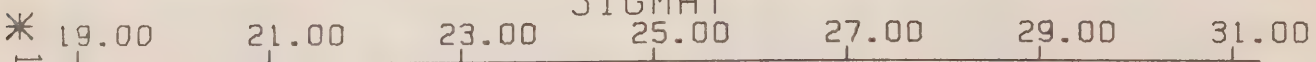
TEMPERATURE, C



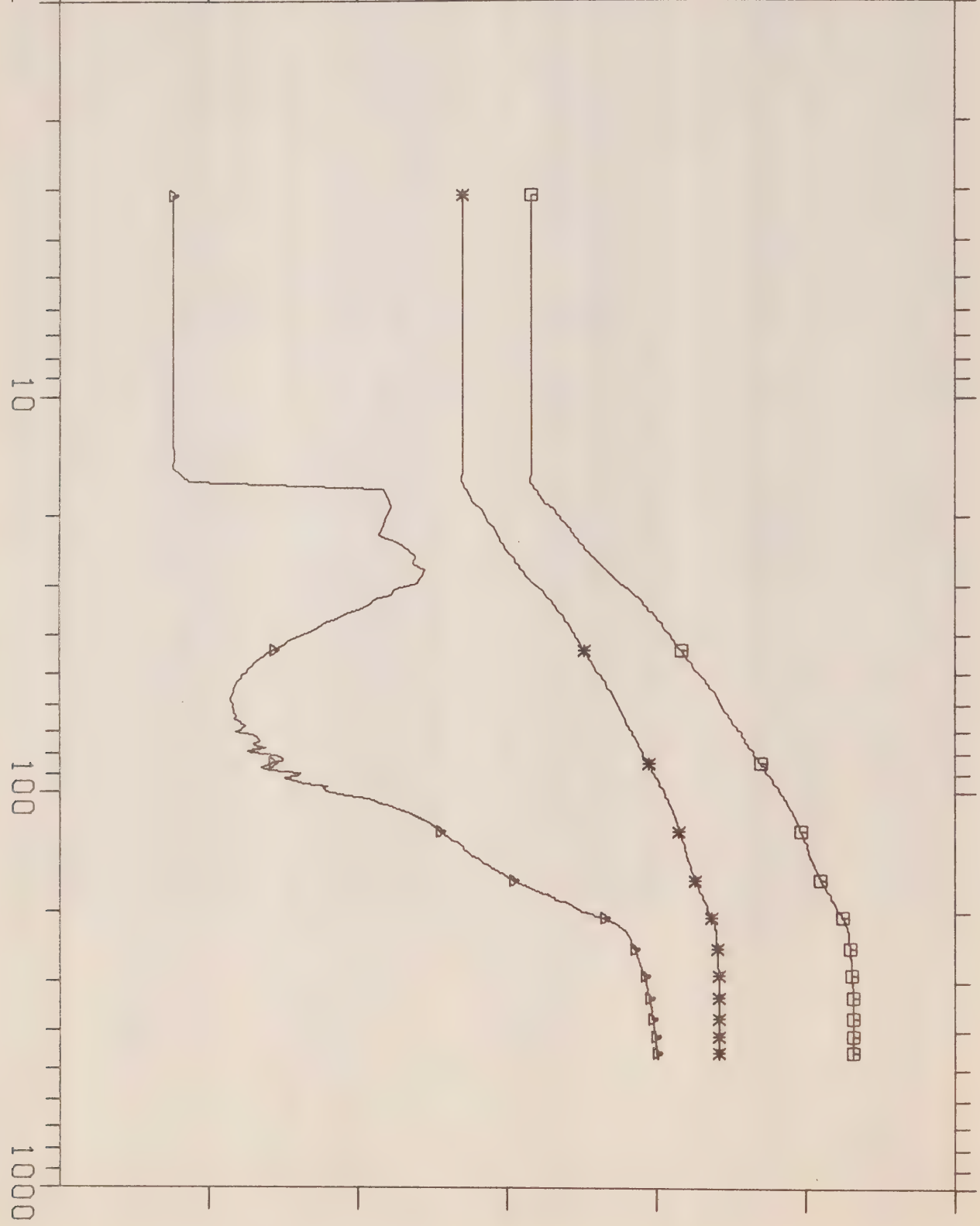
SALINITY 0/00



SIGMAT



DEPTH M





CRUISE 15-76-015

D'IBERVILLE FIORD-76

EXPER NO. 2013

LAT N.80-34-45

LONG W.79-29-00

WATER DEPTH 495

DEPTH INCR.

DATE 110376

LOCAL TIME 2145

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
3.0	3.10	30.340 E	-1.618 D	24.423	1435.3
4.0	4.20	30.343 E	-1.619 D	24.426	1435.3
5.0	5.20	30.344 E	-1.619 D	24.427	1435.3
6.0	6.10	30.344 E	-1.618 D	24.427	1435.3
7.0	7.15	30.345 E	-1.619 D	24.427	1435.3
8.0	8.20	30.345 E	-1.618 D	24.427	1435.4
9.0	9.15	30.345 E	-1.619 D	24.427	1435.4
10.0	10.20	30.344 E	-1.618 D	24.426	1435.4
11.0	11.15	30.347 E	-1.620 D	24.428	1435.4
12.0	12.25	30.345 E	-1.619 D	24.427	1435.4
13.0	13.15	30.344 E	-1.619 D	24.427	1435.4
14.0	14.25	30.343 E	-1.617 D	24.426	1435.5
15.0	15.15	30.343 E	-1.619 D	24.426	1435.5
16.0	16.35	30.320 E	-1.563 D	24.406	1435.7
17.0	17.15	30.404 E	-0.909 D	24.461	1438.9
18.0	18.45	30.529 E	-0.888 D	24.561	1439.2
19.0	19.20	30.639 E	-0.887 D	24.650	1439.4
20.0	20.45	30.761 E	-0.905 D	24.749	1439.5
21.0	21.20	30.840 E	-0.908 D	24.813	1439.6
22.0	22.45	30.929 E	-0.924 D	24.885	1439.7
23.0	23.35	31.009 E	-0.858 D	24.948	1440.1
24.0	24.40	31.080 E	-0.825 D	25.005	1440.4
25.0	25.25	31.166 E	-0.803 D	25.074	1440.6
26.0	26.40	31.256 E	-0.812 D	25.146	1440.7
27.0	27.35	31.335 E	-0.770 D	25.209	1441.1
28.0	28.45	31.430 E	-0.783 D	25.286	1441.2
29.0	29.55	31.517 E	-0.794 D	25.357	1441.2
30.0	30.55	31.640 E	-0.869 D	25.458	1441.1
31.0	31.60	31.715 E	-0.886 D	25.519	1441.1
32.0	32.40	31.793 E	-0.942 D	25.584	1441.0
33.0	33.50	31.850 E	-0.962 D	25.631	1441.0
34.0	34.45	31.904 E	-0.993 D	25.675	1440.9
35.0	35.45	31.987 E	-1.039 D	25.744	1440.8
36.0	36.55	32.042 E	-1.078 D	25.789	1440.8
37.0	37.40	32.089 E	-1.111 D	25.828	1440.7
38.0	38.70	32.125 E	-1.135 D	25.858	1440.6
39.0	39.45	32.177 E	-1.170 D	25.900	1440.6
40.0	40.60	32.222 E	-1.208 D	25.939	1440.5
41.0	41.55	32.265 E	-1.233 D	25.973	1440.4
42.0	42.60	32.298 E	-1.254 D	26.001	1440.4
43.0	43.70	32.339 E	-1.279 D	26.035	1440.3
44.0	44.60	32.388 E	-1.307 D	26.075	1440.3
45.0	45.70	32.427 E	-1.325 D	26.107	1440.3
46.0	46.60	32.456 E	-1.340 D	26.131	1440.3
47.0	47.80	32.494 E	-1.354 D	26.162	1440.3
48.0	48.60	32.525 E	-1.365 D	26.187	1440.3
49.0	49.75	32.558 E	-1.372 D	26.214	1440.3
50.0	50.60	32.603 E	-1.384 D	26.251	1440.3
51.0	51.75	32.651 E	-1.396 D	26.290	1440.4
52.0	52.70	32.690 E	-1.404 D	26.322	1440.4
53.0	53.80	32.719 E	-1.410 D	26.346	1440.4
54.0	54.85	32.761 E	-1.415 D	26.380	1440.5
55.0	55.85	32.791 E	-1.416 D	26.404	1440.5
56.0	56.70	32.818 E	-1.422 D	26.426	1440.6
57.0	57.90	32.842 E	-1.423 D	26.445	1440.6
58.0	58.95	32.868 E	-1.423 D	26.466	1440.7
59.0	59.85	32.885 E	-1.416 D	26.480	1440.7
60.0	60.85	32.907 E	-1.418 D	26.498	1440.8
61.0	61.90	32.922 E	-1.414 D	26.511	1440.8
62.0	63.05	32.952 E	-1.415 D	26.535	1440.9
63.0	63.95	32.981 E	-1.407 D	26.558	1441.0
64.0	64.95	33.002 E	-1.414 D	26.575	1441.0

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
65.0	65.85	33.013 E	-1.396 D	26.583	1441.1
66.0	67.00	33.041 E	-1.392 D	26.606	1441.2
67.0	67.90	33.069 E	-1.375 D	26.628	1441.3
68.0	69.10	33.104 E	-1.392 D	26.657	1441.3
69.0	70.05	33.130 E	-1.410 D	26.679	1441.3
70.0	71.15	33.142 E	-1.349 D	26.687	1441.6
71.0	72.15	33.173 E	-1.335 D	26.711	1441.7
72.0	73.15	33.186 E	-1.333 D	26.722	1441.8
73.0	74.20	33.203 E	-1.326 D	26.735	1441.8
74.0	75.00	33.225 E	-1.348 D	26.754	1441.8
75.0	76.15	33.238 E	-1.331 D	26.764	1441.9
76.0	77.05	33.259 E	-1.306 D	26.780	1442.1
77.0	78.20	33.292 E	-1.370 D	26.809	1441.3
78.0	79.30	33.298 E	-1.353 D	26.813	1441.9
79.0	80.20	33.316 E	-1.270 D	26.825	1442.4
80.0	81.20	33.341 E	-1.264 D	26.845	1442.4
81.0	82.10	33.356 E	-1.249 D	26.857	1442.5
82.0	83.30	33.373 E	-1.248 D	26.871	1442.6
83.0	84.20	33.402 E	-1.286 D	26.895	1442.5
84.0	85.35	33.423 E	-1.299 D	26.913	1442.5
85.0	86.30	33.450 E	-1.324 D	26.935	1442.4
86.0	87.30	33.451 E	-1.296 D	26.935	1442.5
87.0	88.30	33.455 E	-1.238 D	26.937	1442.8
88.0	89.35	33.490 E	-1.188 D	26.963	1443.1
89.0	90.40	33.521 E	-1.202 D	26.989	1443.1
90.0	91.30	33.543 E	-1.246 D	27.008	1443.0
91.0	92.25	33.551 E	-1.234 D	27.014	1443.1
92.0	93.25	33.566 E	-1.211 D	27.026	1443.2
93.0	94.45	33.578 E	-1.179 D	27.035	1443.4
94.0	95.50	33.596 E	-1.129 D	27.048	1443.7
95.0	96.35	33.617 E	-1.102 D	27.064	1443.8
96.0	97.40	33.645 E	-1.116 D	27.087	1443.8
97.0	98.50	33.660 E	-1.105 D	27.099	1443.9
98.0	99.50	33.669 E	-1.087 D	27.105	1444.0
99.0	100.40	33.684 D	-1.060 C	27.116	1444.2
100.0	101.45	33.692 D	-1.037 C	27.123	1444.3
101.0	102.60	33.703 D	-1.001 C	27.130	1444.5
102.0	103.45	33.722 D	-0.966 C	27.144	1444.7
103.0	104.45	33.741 D	-0.943 C	27.158	1444.9
104.0	105.70	33.751 D	-0.923 C	27.166	1445.0
105.0	106.60	33.769 D	-0.904 C	27.180	1445.1
106.0	107.70	33.777 D	-0.889 C	27.186	1445.2
107.0	108.60	33.788 D	-0.873 C	27.194	1445.3
108.0	109.65	33.799 D	-0.866 C	27.203	1445.4
109.0	110.60	33.812 D	-0.850 C	27.213	1445.5
110.0	111.55	33.822 D	-0.836 C	27.221	1445.6
111.0	112.80	33.833 D	-0.819 C	27.229	1445.7
112.0	113.70	33.848 D	-0.809 C	27.240	1445.8
113.0	114.70	33.856 D	-0.800 C	27.246	1445.9
114.0	115.75	33.865 D	-0.791 C	27.254	1446.0
115.0	116.80	33.874 D	-0.780 C	27.261	1446.0
116.0	117.85	33.885 D	-0.769 C	27.269	1446.1
117.0	118.85	33.894 D	-0.761 C	27.276	1446.2
118.0	119.85	33.904 D	-0.754 C	27.284	1446.2
119.0	120.85	33.912 D	-0.747 C	27.290	1446.3
120.0	121.85	33.919 D	-0.741 C	27.295	1446.4
121.0	123.00	33.925 D	-0.736 C	27.300	1446.4
122.0	124.00	33.929 D	-0.729 C	27.303	1446.5
123.0	124.90	33.935 D	-0.723 C	27.308	1446.5
124.0	125.80	33.947 D	-0.717 C	27.317	1446.6
125.0	126.90	33.953 D	-0.708 C	27.322	1446.6
126.0	128.05	33.963 D	-0.699 C	27.329	1446.7
127.0	128.85	33.971 D	-0.695 C	27.335	1446.8
128.0	129.95	33.980 D	-0.688 C	27.342	1446.8
129.0	131.05	33.985 D	-0.679 C	27.346	1446.9
130.0	132.05	34.001 D	-0.669 C	27.359	1447.0
131.0	132.90	34.007 D	-0.663 C	27.363	1447.0
132.0	134.10	34.013 D	-0.659 C	27.368	1447.1
133.0	135.10	34.017 D	-0.654 C	27.371	1447.1



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
134.0	136.00	34.021 D	-0.648 C	27.374	1447.2
135.0	137.25	34.026 D	-0.645 C	27.378	1447.2
136.0	138.20	34.030 D	-0.643 C	27.381	1447.2
137.0	139.20	34.032 D	-0.639 C	27.383	1447.3
138.0	140.00	34.039 D	-0.634 C	27.388	1447.3
139.0	141.05	34.044 D	-0.628 C	27.392	1447.4
140.0	142.25	34.049 D	-0.624 C	27.395	1447.4
141.0	143.20	34.057 D	-0.620 C	27.402	1447.5
142.0	144.20	34.064 D	-0.612 C	27.408	1447.5
143.0	145.30	34.068 D	-0.602 C	27.410	1447.6
144.0	146.25	34.076 D	-0.596 C	27.416	1447.7
145.0	147.30	34.083 D	-0.592 C	27.422	1447.7
146.0	148.35	34.092 D	-0.587 C	27.429	1447.8
147.0	149.35	34.099 D	-0.579 C	27.435	1447.8
148.0	150.35	34.106 D	-0.570 C	27.440	1447.9
149.0	151.35	34.114 D	-0.563 C	27.445	1447.9
150.0	152.45	34.120 D	-0.558 C	27.451	1448.0
151.0	153.45	34.125 D	-0.554 C	27.455	1448.0
152.0	154.30	34.132 D	-0.549 C	27.460	1448.1
153.0	155.25	34.138 D	-0.544 C	27.464	1448.1
154.0	156.50	34.145 D	-0.536 C	27.470	1448.2
155.0	157.45	34.154 D	-0.530 C	27.477	1448.3
156.0	158.50	34.159 D	-0.521 C	27.480	1448.3
157.0	159.45	34.166 D	-0.515 C	27.486	1448.4
158.0	160.55	34.175 D	-0.508 C	27.493	1448.4
159.0	161.40	34.179 D	-0.501 C	27.496	1448.5
160.0	162.55	34.187 D	-0.494 C	27.502	1448.6
161.0	163.55	34.195 D	-0.490 C	27.508	1448.6
162.0	164.50	34.198 D	-0.484 C	27.510	1448.6
163.0	165.60	34.206 D	-0.478 C	27.516	1448.7
164.0	166.75	34.213 D	-0.471 C	27.522	1448.8
165.0	167.65	34.221 D	-0.464 C	27.528	1448.8
166.0	168.55	34.229 D	-0.455 C	27.534	1448.9
167.0	169.65	34.236 D	-0.450 C	27.539	1448.9
168.0	170.50	34.242 D	-0.441 C	27.544	1449.0
169.0	171.70	34.254 D	-0.432 C	27.554	1449.1
170.0	172.70	34.261 D	-0.424 C	27.558	1449.1
171.0	173.55	34.266 D	-0.418 C	27.563	1449.2
172.0	174.80	34.275 D	-0.408 C	27.569	1449.3
173.0	175.85	34.282 D	-0.400 C	27.575	1449.3
174.0	176.90	34.285 D	-0.393 C	27.580	1449.4
175.0	177.85	34.296 D	-0.388 C	27.585	1449.4
176.0	178.80	34.311 D	-0.376 C	27.597	1449.5
177.0	179.80	34.319 D	-0.366 C	27.603	1449.6
178.0	180.80	34.330 D	-0.356 C	27.612	1449.7
179.0	182.00	34.334 D	-0.350 C	27.615	1449.7
180.0	183.00	34.341 D	-0.344 C	27.620	1449.8
181.0	184.00	34.346 D	-0.341 C	27.624	1449.8
182.0	184.90	34.349 D	-0.339 C	27.626	1449.9
183.0	185.95	34.355 D	-0.333 C	27.630	1449.9
184.0	186.95	34.364 D	-0.318 C	27.637	1450.0
185.0	187.80	34.377 D	-0.309 C	27.647	1450.1
186.0	189.05	34.387 D	-0.297 C	27.654	1450.2
187.0	189.90	34.393 D	-0.290 C	27.659	1450.2
188.0	191.00	34.400 D	-0.284 C	27.664	1450.3
189.0	192.05	34.408 D	-0.278 C	27.671	1450.3
190.0	193.10	34.412 D	-0.272 C	27.674	1450.4
191.0	194.05	34.417 D	-0.269 C	27.677	1450.4
192.0	194.95	34.422 D	-0.265 C	27.681	1450.5
193.0	196.05	34.424 D	-0.262 C	27.682	1450.5
194.0	197.20	34.429 D	-0.255 C	27.687	1450.6
195.0	198.25	34.435 D	-0.249 C	27.691	1450.6
196.0	199.20	34.443 D	-0.239 C	27.697	1450.7
197.0	200.20	34.451 D	-0.226 C	27.703	1450.8
198.0	201.30	34.462 D	-0.216 C	27.711	1450.9
199.0	202.35	34.471 D	-0.208 C	27.718	1450.9
200.0	203.30	34.475 D	-0.201 C	27.721	1451.0
201.0	204.10	34.489 D	-0.191 C	27.732	1451.1
202.0	205.15	34.497 D	-0.185 C	27.738	1451.1



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
203.0	206.35	34.505 D	-0.177 C	27.744	1451.2
204.0	207.30	34.510 D	-0.168 C	27.748	1451.2
205.0	208.15	34.516 D	-0.165 C	27.752	1451.3
206.0	209.40	34.522 D	-0.157 C	27.757	1451.3
207.0	210.50	34.528 D	-0.150 C	27.761	1451.4
208.0	211.30	34.533 D	-0.145 C	27.765	1451.4
209.0	212.25	34.539 D	-0.141 C	27.770	1451.5
210.0	213.45	34.541 D	-0.133 C	27.771	1451.5
211.0	214.35	34.547 D	-0.130 C	27.776	1451.6
212.0	215.40	34.549 D	-0.127 C	27.777	1451.6
213.0	216.45	34.553 D	-0.124 C	27.781	1451.7
214.0	217.60	34.555 D	-0.120 C	27.782	1451.7
215.0	218.55	34.556 D	-0.115 C	27.783	1451.7
216.0	219.50	34.561 D	-0.113 C	27.786	1451.8
217.0	220.60	34.565 D	-0.110 C	27.789	1451.8
218.0	221.40	34.567 D	-0.106 C	27.791	1451.8
219.0	222.60	34.569 D	-0.103 C	27.792	1451.9
220.0	223.45	34.573 D	-0.102 C	27.795	1451.9
221.0	224.65	34.573 D	-0.099 C	27.795	1451.9
222.0	225.70	34.576 D	-0.099 C	27.797	1451.9
223.0	226.65	34.577 D	-0.097 C	27.798	1452.0
224.0	227.55	34.577 D	-0.094 C	27.798	1452.0
225.0	228.65	34.578 D	-0.093 C	27.799	1452.0
226.0	229.75	34.578 D	-0.091 C	27.799	1452.1
227.0	230.85	34.581 D	-0.091 C	27.801	1452.1
228.0	231.80	34.582 D	-0.090 C	27.802	1452.1
229.0	232.80	34.583 D	-0.088 C	27.803	1452.1
230.0	233.80	34.583 D	-0.086 C	27.803	1452.2
231.0	234.90	34.585 D	-0.086 C	27.805	1452.2
232.0	235.85	34.587 D	-0.085 C	27.805	1452.2
233.0	236.75	34.589 D	-0.085 C	27.807	1452.2
234.0	237.70	34.589 D	-0.084 C	27.807	1452.2
235.0	238.90	34.590 D	-0.083 C	27.808	1452.3
236.0	239.90	34.590 D	-0.080 C	27.808	1452.3
237.0	240.80	34.592 D	-0.080 C	27.810	1452.3
238.0	241.90	34.593 D	-0.079 C	27.811	1452.3
239.0	242.80	34.595 D	-0.078 C	27.812	1452.4
240.0	243.85	34.597 D	-0.078 C	27.813	1452.4
241.0	244.90	34.597 D	-0.076 C	27.813	1452.4
242.0	245.95	34.596 D	-0.075 C	27.813	1452.4
243.0	247.10	34.598 D	-0.073 C	27.814	1452.4
244.0	248.10	34.599 D	-0.072 C	27.815	1452.5
245.0	249.05	34.600 D	-0.072 C	27.816	1452.5
246.0	250.05	34.601 D	-0.071 C	27.816	1452.5
247.0	251.10	34.601 D	-0.069 C	27.816	1452.5
248.0	251.95	34.601 D	-0.068 C	27.816	1452.6
249.0	252.95	34.604 D	-0.069 C	27.819	1452.6
250.0	254.00	34.604 D	-0.067 C	27.819	1452.6
251.0	255.15	34.605 D	-0.066 C	27.820	1452.6
252.0	256.05	34.605 D	-0.065 C	27.819	1452.6
253.0	257.05	34.606 D	-0.065 C	27.820	1452.7
254.0	258.05	34.607 D	-0.064 C	27.821	1452.7
255.0	259.05	34.607 D	-0.063 C	27.821	1452.7
256.0	260.10	34.609 D	-0.063 C	27.822	1452.7
257.0	261.10	34.610 D	-0.062 C	27.823	1452.7
258.0	262.10	34.610 D	-0.061 C	27.823	1452.8
259.0	263.25	34.611 D	-0.060 C	27.824	1452.8
260.0	264.40	34.612 D	-0.059 C	27.825	1452.8
261.0	265.30	34.613 D	-0.059 C	27.825	1452.8
262.0	266.40	34.612 D	-0.058 C	27.825	1452.9
263.0	267.45	34.612 D	-0.056 C	27.825	1452.9
264.0	268.30	34.615 D	-0.056 C	27.827	1452.9
265.0	269.40	34.614 D	-0.055 C	27.826	1452.9
266.0	270.25	34.616 D	-0.054 C	27.827	1452.9
267.0	271.45	34.616 D	-0.054 C	27.828	1453.0
268.0	272.55	34.616 D	-0.053 C	27.828	1453.0
269.0	273.50	34.618 D	-0.053 C	27.829	1453.0
270.0	274.55	34.618 D	-0.052 C	27.829	1453.0
271.0	275.55	34.618 D	-0.050 C	27.829	1453.0

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
272.0	276.50	34.619 D	-0.050 C	27.830	1453.1
273.0	277.45	34.620 D	-0.049 C	27.831	1453.1
274.0	278.50	34.621 D	-0.049 C	27.831	1453.1
275.0	279.60	34.620 D	-0.048 C	27.831	1453.1
276.0	280.50	34.621 D	-0.048 C	27.832	1453.1
277.0	281.65	34.621 D	-0.046 C	27.831	1453.2
278.0	282.55	34.622 D	-0.045 C	27.832	1453.2
279.0	283.70	34.622 D	-0.045 C	27.832	1453.2
280.0	284.70	34.623 D	-0.045 C	27.833	1453.2
281.0	285.70	34.624 D	-0.044 C	27.833	1453.3
282.0	286.70	34.625 D	-0.044 C	27.834	1453.3
283.0	287.80	34.622 D	-0.041 C	27.832	1453.3
284.0	288.70	34.625 D	-0.042 C	27.835	1453.3
285.0	289.85	34.625 D	-0.041 C	27.834	1453.3
286.0	290.70	34.627 D	-0.042 C	27.836	1453.3
287.0	291.70	34.627 D	-0.041 C	27.836	1453.4
288.0	292.85	34.627 D	-0.039 C	27.836	1453.4
289.0	293.65	34.627 D	-0.038 C	27.835	1453.4
290.0	294.85	34.627 D	-0.038 C	27.836	1453.4
291.0	295.75	34.626 D	-0.037 C	27.835	1453.4
292.0	296.75	34.627 D	-0.036 C	27.835	1453.5
293.0	297.85	34.628 D	-0.036 C	27.836	1453.5
294.0	298.85	34.628 D	-0.036 C	27.837	1453.5
295.0	299.90	34.630 D	-0.037 C	27.838	1453.5
296.0	300.90	34.630 D	-0.036 C	27.838	1453.5
297.0	302.00	34.627 D	-0.033 C	27.836	1453.6
298.0	303.00	34.631 D	-0.035 C	27.838	1453.6
299.0	303.95	34.630 D	-0.035 C	27.838	1453.6
300.0	304.95	34.630 D	-0.034 C	27.838	1453.6
301.0	306.05	34.631 D	-0.034 C	27.838	1453.6
302.0	307.15	34.629 D	-0.031 C	27.837	1453.7
303.0	308.10	34.632 D	-0.033 C	27.840	1453.7
304.0	308.95	34.631 D	-0.033 C	27.838	1453.7
305.0	310.10	34.633 D	-0.032 C	27.840	1453.7
306.0	311.15	34.631 D	-0.031 C	27.839	1453.7
307.0	312.25	34.631 D	-0.030 C	27.839	1453.8
308.0	313.05	34.633 D	-0.031 C	27.840	1453.8
309.0	314.20	34.633 D	-0.030 C	27.840	1453.8
310.0	315.05	34.632 D	-0.030 C	27.839	1453.8
311.0	316.25	34.633 D	-0.030 C	27.840	1453.8
312.0	317.30	34.633 D	-0.029 C	27.840	1453.8
313.0	318.15	34.633 D	-0.030 C	27.840	1453.9
314.0	319.35	34.633 D	-0.028 C	27.840	1453.9
315.0	320.10	34.635 D	-0.029 C	27.842	1453.9
316.0	321.20	34.635 D	-0.028 C	27.842	1453.9
317.0	322.40	34.633 D	-0.026 C	27.840	1453.9
318.0	323.35	34.634 D	-0.027 C	27.841	1454.0
319.0	324.35	34.635 D	-0.027 C	27.841	1454.0
320.0	325.35	34.634 D	-0.027 C	27.841	1454.0
321.0	326.25	34.635 D	-0.026 C	27.842	1454.0
322.0	327.35	34.636 D	-0.026 C	27.842	1454.0
323.0	328.55	34.634 D	-0.025 C	27.841	1454.1
324.0	329.30	34.636 D	-0.026 C	27.843	1454.1
325.0	330.45	34.635 D	-0.024 C	27.841	1454.1
326.0	331.55	34.636 D	-0.024 C	27.842	1454.1
327.0	332.35	34.638 D	-0.025 C	27.844	1454.1
328.0	333.55	34.635 D	-0.023 C	27.841	1454.1
329.0	334.60	34.637 D	-0.023 C	27.843	1454.2
330.0	335.55	34.634 D	-0.022 C	27.841	1454.2
331.0	336.60	34.636 D	-0.023 C	27.842	1454.2
332.0	337.70	34.636 D	-0.022 C	27.842	1454.2
333.0	338.45	34.636 D	-0.020 C	27.842	1454.2
334.0	339.55	34.638 D	-0.021 C	27.843	1454.3
335.0	340.70	34.635 D	-0.019 C	27.841	1454.3
336.0	341.60	34.638 D	-0.021 C	27.844	1454.3
337.0	342.70	34.636 D	-0.020 C	27.842	1454.3
338.0	343.60	34.638 D	-0.021 C	27.844	1454.3
339.0	344.65	34.637 D	-0.019 C	27.843	1454.4
340.0	345.75	34.637 D	-0.019 C	27.843	1454.4



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
341.0	346.85	34.636 D	-0.016 C	27.842	1454.4
342.0	347.90	34.637 D	-0.017 C	27.843	1454.4
343.0	348.85	34.638 D	-0.017 C	27.843	1454.4
344.0	349.65	34.638 D	-0.018 C	27.844	1454.4
345.0	350.65	34.637 D	-0.017 C	27.842	1454.5
346.0	351.75	34.636 D	-0.016 C	27.842	1454.5
347.0	352.90	34.637 D	-0.016 C	27.843	1454.5
348.0	353.85	34.638 D	-0.016 C	27.843	1454.5
349.0	354.90	34.637 D	-0.016 C	27.843	1454.5
350.0	355.95	34.637 D	-0.015 C	27.843	1454.6
351.0	356.95	34.637 D	-0.016 C	27.843	1454.6
352.0	358.00	34.639 D	-0.017 C	27.845	1454.6
353.0	358.95	34.638 D	-0.016 C	27.843	1454.6
354.0	360.00	34.639 D	-0.018 C	27.845	1454.6
355.0	361.05	34.637 D	-0.014 C	27.843	1454.6
356.0	362.10	34.638 D	-0.015 C	27.843	1454.7
357.0	363.05	34.637 D	-0.015 C	27.843	1454.7
358.0	364.05	34.639 D	-0.016 C	27.844	1454.7
359.0	365.05	34.639 D	-0.015 C	27.844	1454.7
360.0	366.05	34.638 D	-0.014 C	27.844	1454.7
361.0	367.05	34.640 D	-0.015 C	27.845	1454.7
362.0	368.05	34.640 D	-0.015 C	27.845	1454.8
363.0	369.05	34.638 D	-0.013 C	27.844	1454.8
364.0	370.10	34.638 D	-0.013 C	27.843	1454.8
365.0	371.10	34.637 D	-0.012 C	27.843	1454.8
366.0	372.05	34.637 D	-0.012 C	27.842	1454.8
367.0	373.05	34.638 D	-0.012 C	27.843	1454.9
368.0	374.15	34.637 D	-0.011 C	27.843	1454.9
369.0	375.35	34.638 D	-0.011 C	27.843	1454.9
370.0	376.25	34.640 D	-0.011 C	27.845	1454.9
371.0	377.20	34.638 D	-0.011 C	27.844	1454.9
372.0	378.30	34.638 D	-0.010 C	27.843	1454.9
373.0	379.20	34.639 D	-0.011 C	27.844	1455.0
374.0	380.30	34.643 D	-0.014 C	27.847	1455.0
375.0	381.35	34.640 D	-0.011 C	27.845	1455.0
376.0	382.40	34.639 D	-0.010 C	27.844	1455.0
377.0	383.45	34.639 D	-0.010 C	27.844	1455.0
378.0	384.30	34.639 D	-0.010 C	27.844	1455.0
379.0	385.25	34.639 D	-0.009 C	27.844	1455.1
380.0	386.35	34.638 D	-0.009 C	27.843	1455.1
381.0	387.45	34.637 D	-0.009 C	27.843	1455.1
382.0	388.55	34.638 D	-0.009 C	27.843	1455.1
383.0	389.55	34.639 D	-0.008 C	27.844	1455.1
384.0	390.55	34.638 D	-0.009 C	27.844	1455.2
385.0	391.65	34.638 D	-0.008 C	27.843	1455.2
386.0	392.50	34.639 D	-0.008 C	27.844	1455.2
387.0	393.70	34.639 D	-0.007 C	27.844	1455.2
388.0	394.60	34.638 D	-0.007 C	27.843	1455.2
389.0	395.55	34.639 D	-0.008 C	27.844	1455.2
390.0	396.65	34.639 D	-0.008 C	27.844	1455.3
391.0	397.65	34.640 D	-0.008 C	27.845	1455.3
392.0	398.65	34.639 D	-0.007 C	27.844	1455.3
393.0	399.70	34.638 D	-0.006 C	27.843	1455.3
394.0	400.75	34.640 D	-0.007 C	27.845	1455.3
395.0	401.60	34.639 D	-0.006 C	27.843	1455.3
396.0	402.70	34.639 D	-0.006 C	27.844	1455.4
397.0	403.60	34.639 D	-0.006 C	27.844	1455.4
398.0	404.80	34.640 D	-0.006 C	27.844	1455.4
399.0	405.75	34.640 D	-0.006 C	27.845	1455.4
400.0	406.80	34.640 D	-0.005 C	27.845	1455.4
401.0	407.85	34.638 D	-0.005 C	27.843	1455.5
402.0	408.80	34.638 D	-0.004 C	27.843	1455.5
403.0	409.70	34.640 D	-0.005 C	27.844	1455.5
404.0	410.75	34.639 D	-0.005 C	27.844	1455.5
405.0	411.90	34.640 D	-0.005 C	27.845	1455.5
406.0	412.95	34.638 D	-0.004 C	27.843	1455.5
407.0	413.85	34.640 D	-0.005 C	27.845	1455.6
408.0	414.95	34.640 D	-0.004 C	27.844	1455.6
409.0	416.00	34.639 D	-0.004 C	27.844	1455.6



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
410.0	417.10	34.640 D	-0.005 C	27.844	1455.6
411.0	418.05	34.638 D	-0.003 C	27.843	1455.6
412.0	419.00	34.638 D	-0.002 C	27.843	1455.7
413.0	420.10	34.639 D	-0.003 C	27.843	1455.7
414.0	421.05	34.641 D	-0.004 C	27.845	1455.7
415.0	422.05	34.639 D	-0.003 C	27.844	1455.7
416.0	423.00	34.638 D	-0.003 C	27.843	1455.7
417.0	424.15	34.638 D	-0.002 C	27.843	1455.7
418.0	425.10	34.641 D	-0.004 C	27.845	1455.7
419.0	426.00	34.638 D	-0.002 C	27.843	1455.8
420.0	427.20	34.642 D	-0.003 C	27.846	1455.8
421.0	428.20	34.640 D	-0.003 C	27.844	1455.8
422.0	429.20	34.642 D	-0.003 C	27.846	1455.8
423.0	430.25	34.639 D	-0.002 C	27.843	1455.8
424.0	431.10	34.641 D	-0.003 C	27.845	1455.8
425.0	432.25	34.638 D	-0.001 C	27.843	1455.9
426.0	433.20	34.641 D	-0.002 C	27.845	1455.9
427.0	434.30	34.638 D	-0.001 C	27.843	1455.9
428.0	435.25	34.639 D	-0.001 C	27.844	1455.9
429.0	436.25	34.638 D	0.001 C	27.842	1455.9
430.0	437.20	34.639 D	-0.001 C	27.844	1456.0
431.0	438.35	34.639 D	0.0 C	27.843	1456.0
432.0	439.35	34.639 D	-0.001 C	27.844	1456.0
433.0	440.30	34.642 D	-0.001 C	27.846	1456.0
434.0	441.30	34.640 D	0.0 C	27.844	1456.0
435.0	442.40	34.639 D	0.0 C	27.844	1456.0
436.0	443.50	34.639 D	0.0 C	27.843	1456.1
437.0	444.50	34.638 D	0.001 C	27.843	1456.1
438.0	445.50	34.639 D	0.001 C	27.844	1456.1
439.0	446.45	34.640 D	0.0 C	27.844	1456.1
440.0	447.35	34.641 D	0.0 C	27.845	1456.1
441.0	448.55	34.640 D	0.0 C	27.844	1456.1
442.0	449.45	34.641 D	0.0 C	27.845	1456.2
443.0	450.65	34.642 D	0.0 C	27.846	1456.2
444.0	451.65	34.640 D	0.001 C	27.844	1456.2
445.0	452.55	34.638 D	0.002 C	27.843	1456.2
446.0	453.40	34.640 D	0.001 C	27.845	1456.2
447.0	454.60	34.641 D	0.001 C	27.845	1456.3
448.0	455.70	34.638 D	0.003 C	27.843	1456.3
449.0	456.65	34.641 D	0.001 C	27.845	1456.3
450.0	457.75	34.641 D	0.002 C	27.845	1456.3
451.0	458.70	34.639 D	0.003 C	27.844	1456.3
452.0	459.60	34.640 D	0.002 C	27.844	1456.3
453.0	460.75	34.638 D	0.004 C	27.843	1456.4
454.0	461.65	34.639 D	0.003 C	27.843	1456.4
455.0	462.90	34.638 D	0.003 C	27.843	1456.4
456.0	463.65	34.639 D	0.003 C	27.844	1456.4
457.0	464.65	34.640 D	0.003 C	27.844	1456.4
458.0	465.75	34.639 D	0.003 C	27.844	1456.4
459.0	466.85	34.639 D	0.003 C	27.843	1456.5
460.0	467.80	34.640 D	0.003 C	27.844	1456.5

TEMPERATURE, C

△ -2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00

SALINITY 0/00

□ 24.00 26.00 28.00 30.00 32.00 34.00 36.00

SIGMAT

\* 19.00 21.00 23.00 25.00 27.00 29.00 31.00

DEPTH M

10

100

1000

EXPERIMENT 2014



CRUISE 15-76-015

D'IBERVILLE FIORD-76

EXPER NO. 2014

LAT N.80-34-45

LONG W.79-29-00

WATER DEPTH 495

DEPTH INCR.

DATE 120376

LOCAL TIME 1155

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
2.0	2.55	30.165 E	-1.633 D	24.281	1434.9
3.0	3.70	30.260 E	-1.631 D	24.359	1435.1
4.0	4.65	30.304 E	-1.630 D	24.394	1435.2
5.0	5.75	30.329 E	-1.629 D	24.415	1435.3
6.0	6.65	30.342 E	-1.629 D	24.425	1435.3
7.0	7.60	30.349 E	-1.631 D	24.431	1435.3
8.0	8.75	30.351 E	-1.629 D	24.432	1435.3
9.0	9.80	30.352 E	-1.629 D	24.433	1435.3
10.0	10.60	30.355 E	-1.630 D	24.436	1435.4
11.0	11.80	30.356 E	-1.631 D	24.436	1435.4
12.0	12.80	30.356 E	-1.630 D	24.436	1435.4
13.0	13.80	30.355 E	-1.630 D	24.436	1435.4
14.0	14.70	30.356 E	-1.630 D	24.436	1435.4
15.0	15.90	30.358 E	-1.631 D	24.438	1435.4
16.0	16.90		-0.915 D		
17.0	17.85	30.491 E	-0.886 D	24.531	1439.2
18.0	18.75	30.604 E	-0.904 D	24.622	1439.3
19.0	19.75	30.692 E	-0.914 D	24.694	1439.4
20.0	21.00	30.789 E	-0.881 D	24.771	1439.7
21.0	21.95	30.886 E	-0.879 D	24.850	1439.8
22.0	22.85	30.958 E	-0.861 D	24.907	1440.0
23.0	23.85	31.044 E	-0.840 D	24.976	1440.3
24.0	24.95	31.137 E	-0.797 D	25.050	1440.6
25.0	25.90	31.227 E	-0.791 D	25.122	1440.8
26.0	27.10	31.321 E	-0.803 D	25.198	1440.9
27.0	28.00	31.407 E	-0.773 D	25.267	1441.2
28.0	28.90	31.526 E	-0.801 D	25.365	1441.2
29.0	30.05	31.638 E	-0.850 D	25.456	1441.2
30.0	31.05	31.717 E	-0.886 D	25.521	1441.1
31.0	32.05	31.812 E	-0.951 D	25.599	1441.0
32.0	33.00	31.882 E	-0.985 D	25.657	1440.9
33.0	34.10	31.926 E	-1.005 D	25.693	1440.9
34.0	35.05	31.971 E	-1.028 D	25.730	1440.9
35.0	36.20	32.021 E	-1.058 D	25.772	1440.8
36.0	37.15	32.069 E	-1.092 D	25.811	1440.7
37.0	38.10	32.114 E	-1.126 D	25.849	1440.7
38.0	39.15	32.152 E	-1.152 D	25.880	1440.6
39.0	40.10	32.192 E	-1.181 D	25.914	1440.5
40.0	41.10	32.237 E	-1.219 D	25.950	1440.4
41.0	42.20	32.297 E	-1.257 D	26.001	1440.4
42.0	43.05	32.347 E	-1.283 D	26.041	1440.3
43.0	44.15	32.374 E	-1.301 D	26.064	1440.3
44.0	45.30	32.420 E	-1.322 D	26.101	1440.3
45.0	46.30	32.464 E	-1.342 D	26.138	1440.3
46.0	47.25	32.500 E	-1.356 D	26.167	1440.3
47.0	48.20	32.531 E	-1.364 D	26.192	1440.3
48.0	49.45	32.565 E	-1.373 D	26.220	1440.3
49.0	50.25	32.607 E	-1.383 D	26.254	1440.3
50.0	51.40	32.658 E	-1.397 D	26.296	1440.4
51.0	52.35	32.690 E	-1.401 D	26.322	1440.4
52.0	53.30	32.710 E	-1.404 D	26.338	1440.4
53.0	54.45	32.749 E	-1.417 D	26.370	1440.4
54.0	55.25	32.786 E	-1.418 D	26.400	1440.5
55.0	56.45	32.825 E	-1.420 D	26.431	1440.6
56.0	57.40	32.851 E	-1.414 D	26.453	1440.7
57.0	58.55	32.882 E	-1.416 D	26.478	1440.7
58.0	59.45	32.904 E	-1.417 D	26.495	1440.7
59.0	60.60	32.916 E	-1.410 D	26.505	1440.8
60.0	61.45	32.940 E	-1.415 D	26.525	1440.8
61.0	62.65	32.958 E	-1.412 D	26.539	1440.9
62.0	63.55	32.977 E	-1.407 D	26.555	1441.0
63.0	64.65	33.011 E	-1.405 D	26.582	1441.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
64.0	65.55	33.030 E	-1.386 D	26.597	1441.2
65.0	66.50	33.053 E	-1.381 D	26.615	1441.2
66.0	67.55	33.082 E	-1.376 D	26.639	1441.3
67.0	68.55	33.109 E	-1.379 D	26.660	1441.4
68.0	69.50	33.131 E	-1.369 D	26.678	1441.5
69.0	70.60	33.142 E	-1.353 D	26.687	1441.6
70.0	71.55	33.179 E	-1.379 D	26.718	1441.5
71.0	72.55	33.199 E	-1.361 D	26.733	1441.6
72.0	73.75	33.213 E	-1.373 D	26.744	1441.6
73.0	74.65	33.224 E	-1.345 D	26.753	1441.8
74.0	75.65	33.256 E	-1.328 D	26.778	1441.9
75.0	76.75	33.277 E	-1.314 D	26.795	1442.0
76.0	77.80	33.303 E	-1.313 D	26.816	1442.1
77.0	78.80	33.316 E	-1.280 D	26.825	1442.3
78.0	79.80	33.339 E	-1.276 D	26.844	1442.4
79.0	80.75	33.370 E	-1.342 D	26.871	1442.1
80.0	81.85	33.365 E	-1.301 D	26.866	1442.3
81.0	82.80	33.400 E	-1.314 D	26.894	1442.3
82.0	83.80	33.419 E	-1.300 D	26.910	1442.4
83.0	84.80	33.452 E	-1.343 D	26.937	1442.3
84.0	85.85	33.436 E	-1.246 D	26.922	1442.7
85.0	87.00	33.489 E	-1.333 D	26.967	1442.4
86.0	87.95	33.488 E	-1.217 D	26.963	1443.0
87.0	89.05	33.503 E	-1.218 D	26.975	1443.0
88.0	89.85	33.536 E	-1.256 D	27.003	1442.9
89.0	91.00	33.549 E	-1.197 D	27.011	1443.2
90.0	91.85	33.577 E	-1.195 D	27.034	1443.3
91.0	93.00	33.584 E	-1.173 D	27.039	1443.4
92.0	94.05	33.601 E	-1.110 D	27.051	1443.7
93.0	95.05	33.623 E	-1.105 D	27.068	1443.8
94.0	96.15	33.649 E	-1.113 D	27.090	1443.8
95.0	96.95	33.661 E	-1.093 D	27.099	1444.0
96.0	98.20	33.670 E	-1.061 D	27.105	1444.1
97.0	99.15	33.689 E	-1.051 D	27.120	1444.2
98.0	100.05	33.695 D	-1.018 C	27.124	1444.4
99.0	101.10	33.712 D	-0.973 C	27.136	1444.7
100.0	102.20	33.725 D	-0.957 C	27.147	1444.8
101.0	103.10	33.736 D	-0.933 C	27.154	1444.9
102.0	104.10	33.752 D	-0.926 C	27.167	1445.0
103.0	105.25	33.761 D	-0.911 C	27.174	1445.1
104.0	106.30	33.775 D	-0.893 C	27.185	1445.2
105.0	107.30	33.790 D	-0.887 C	27.196	1445.3
106.0	108.30	33.798 D	-0.871 C	27.202	1445.4
107.0	109.30	33.809 D	-0.852 C	27.211	1445.5
108.0	110.30	33.822 D	-0.838 C	27.221	1445.6
109.0	111.15	33.831 D	-0.824 C	27.227	1445.7
110.0	112.30	33.843 D	-0.817 C	27.236	1445.7
111.0	113.35	33.852 D	-0.808 C	27.244	1445.8
112.0	114.40	33.858 D	-0.798 C	27.248	1445.9
113.0	115.25	33.866 D	-0.791 C	27.254	1445.9
114.0	116.45	33.879 D	-0.780 C	27.264	1446.0
115.0	117.40	33.889 D	-0.770 C	27.272	1446.1
116.0	118.40	33.896 D	-0.763 C	27.278	1446.2
117.0	119.40	33.902 D	-0.753 C	27.282	1446.2
118.0	120.45	33.914 D	-0.745 C	27.292	1446.3
119.0	121.50	33.922 D	-0.738 C	27.297	1446.4
120.0	122.50	33.929 D	-0.731 C	27.303	1446.4
121.0	123.40	33.940 D	-0.723 C	27.312	1446.5
122.0	124.50	33.950 D	-0.713 C	27.319	1446.6
123.0	125.55	33.957 D	-0.708 C	27.325	1446.6
124.0	126.65	33.961 D	-0.702 C	27.328	1446.7
125.0	127.50	33.970 D	-0.696 C	27.335	1446.7
126.0	128.55	33.983 D	-0.684 C	27.345	1446.8
127.0	129.70	33.990 D	-0.679 C	27.350	1446.9
128.0	130.70	33.996 D	-0.673 C	27.355	1446.9
129.0	131.60	34.002 D	-0.665 C	27.360	1447.0
130.0	132.65	34.010 D	-0.665 C	27.366	1447.0
131.0	133.60	34.014 D	-0.662 C	27.369	1447.1
132.0	134.55	34.017 D	-0.658 C	27.372	1447.1

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
133.0	135.75	34.021 D	-0.654 C	27.374	1447.1
134.0	136.75	34.026 D	-0.646 C	27.378	1447.2
135.0	137.80	34.031 D	-0.641 C	27.382	1447.2
136.0	138.75	34.037 D	-0.635 C	27.386	1447.3
137.0	139.80	34.046 D	-0.626 C	27.394	1447.4
138.0	140.85	34.053 D	-0.621 C	27.399	1447.4
139.0	141.75	34.060 D	-0.613 C	27.404	1447.5
140.0	142.90	34.069 D	-0.606 C	27.411	1447.5
141.0	143.75	34.077 D	-0.600 C	27.418	1447.6
142.0	144.85	34.084 D	-0.594 C	27.423	1447.7
143.0	145.75	34.091 D	-0.589 C	27.428	1447.7
144.0	147.00	34.095 D	-0.583 C	27.431	1447.8
145.0	147.85	34.099 D	-0.578 C	27.434	1447.8
146.0	148.95	34.107 D	-0.574 C	27.441	1447.8
147.0	149.85	34.111 D	-0.568 C	27.444	1447.9
148.0	150.95	34.118 D	-0.560 C	27.449	1448.0
149.0	151.80	34.124 D	-0.556 C	27.454	1448.0
150.0	152.90	34.132 D	-0.549 C	27.459	1448.1
151.0	154.05	34.138 D	-0.545 C	27.464	1448.1
152.0	155.10	34.145 D	-0.540 C	27.470	1448.2
153.0	156.10	34.149 D	-0.535 C	27.473	1448.2
154.0	157.15	34.156 D	-0.528 C	27.478	1448.3
155.0	158.10	34.161 D	-0.523 C	27.482	1448.3
156.0	159.00	34.167 D	-0.519 C	27.486	1448.3
157.0	160.20	34.174 D	-0.512 C	27.492	1448.4
158.0	161.10	34.178 D	-0.505 C	27.495	1448.5
159.0	162.00	34.184 D	-0.499 C	27.500	1448.5
160.0	163.30	34.193 D	-0.492 C	27.506	1448.6
161.0	164.25	34.198 D	-0.486 C	27.511	1448.6
162.0	165.25	34.206 D	-0.479 C	27.516	1448.7
163.0	166.30	34.215 D	-0.472 C	27.523	1448.8
164.0	167.30	34.222 D	-0.464 C	27.529	1448.8
165.0	168.25	34.230 D	-0.457 C	27.535	1448.9
166.0	169.30	34.237 D	-0.451 C	27.540	1448.9
167.0	170.35	34.242 D	-0.447 C	27.544	1449.0
168.0	171.25	34.246 D	-0.440 C	27.547	1449.0
169.0	172.35	34.253 D	-0.434 C	27.553	1449.1
170.0	173.20	34.262 D	-0.427 C	27.560	1449.1
171.0	174.45	34.265 D	-0.416 C	27.565	1449.2
172.0	175.40	34.279 D	-0.407 C	27.572	1449.3
173.0	176.35	34.288 D	-0.399 C	27.579	1449.4
174.0	177.40	34.297 D	-0.395 C	27.587	1449.4
175.0	178.40	34.303 D	-0.385 C	27.590	1449.5
176.0	179.50	34.311 D	-0.378 C	27.597	1449.5
177.0	180.45	34.317 D	-0.364 C	27.601	1449.6
178.0	181.35	34.330 D	-0.355 C	27.611	1449.7
179.0	182.60	34.339 D	-0.342 C	27.618	1449.8
180.0	183.60	34.348 D	-0.334 C	27.625	1449.9
181.0	184.45	34.360 D	-0.323 C	27.634	1449.9
182.0	185.55	34.368 D	-0.319 C	27.640	1450.0
183.0	186.70	34.373 D	-0.314 C	27.644	1450.0
184.0	187.60	34.381 D	-0.305 C	27.650	1450.1
185.0	188.75	34.388 D	-0.298 C	27.656	1450.2
186.0	189.75	34.397 D	-0.290 C	27.662	1450.2
187.0	190.60	34.404 D	-0.281 C	27.667	1450.3
188.0	191.65	34.411 D	-0.274 C	27.673	1450.4
189.0	192.75	34.419 D	-0.270 C	27.679	1450.4
190.0	193.75	34.421 D	-0.266 C	27.680	1450.4
191.0	194.75	34.425 D	-0.263 C	27.684	1450.5
192.0	195.65	34.428 D	-0.257 C	27.686	1450.5
193.0	196.60	34.434 D	-0.251 C	27.690	1450.6
194.0	197.75	34.441 D	-0.239 C	27.695	1450.7
195.0	198.90	34.453 D	-0.227 C	27.704	1450.7
196.0	199.85	34.460 D	-0.219 C	27.710	1450.8
197.0	200.90	34.469 D	-0.212 C	27.717	1450.9
198.0	201.80	34.473 D	-0.207 C	27.720	1450.9
199.0	202.75	34.480 D	-0.199 C	27.725	1451.0
200.0	203.85	34.494 D	-0.190 C	27.736	1451.1
201.0	205.05	34.503 D	-0.181 C	27.743	1451.1



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
202.0	205.90	34.509 D	-0.174 C	27.747	1451.2
203.0	206.95	34.512 D	-0.170 C	27.750	1451.2
204.0	207.80	34.517 D	-0.164 C	27.753	1451.3
205.0	209.00	34.523 D	-0.158 C	27.758	1451.3
206.0	209.95	34.530 D	-0.149 C	27.763	1451.4
207.0	211.00	34.535 D	-0.143 C	27.767	1451.4
208.0	212.10	34.542 D	-0.139 C	27.772	1451.5
209.0	213.20	34.546 D	-0.135 C	27.776	1451.5
210.0	214.05	34.549 D	-0.130 C	27.777	1451.6
211.0	215.20	34.553 D	-0.127 C	27.781	1451.6
212.0	216.20	34.555 D	-0.123 C	27.782	1451.7
213.0	217.00	34.559 D	-0.119 C	27.785	1451.7
214.0	218.20	34.562 D	-0.116 C	27.787	1451.7
215.0	219.05	34.564 D	-0.112 C	27.789	1451.8
216.0	220.25	34.565 D	-0.110 C	27.790	1451.8
217.0	221.15	34.570 D	-0.106 C	27.793	1451.8
218.0	222.25	34.572 D	-0.103 C	27.795	1451.9
219.0	223.30	34.575 D	-0.102 C	27.797	1451.9
220.0	224.15	34.578 D	-0.100 C	27.799	1451.9
221.0	225.35	34.579 D	-0.098 C	27.800	1452.0
222.0	226.15	34.579 D	-0.096 C	27.800	1452.0
223.0	227.30	34.580 D	-0.094 C	27.801	1452.0
224.0	228.30	34.583 D	-0.093 C	27.803	1452.0
225.0	229.40	34.584 D	-0.091 C	27.804	1452.1
226.0	230.20	34.586 D	-0.090 C	27.805	1452.1
227.0	231.40	34.586 D	-0.087 C	27.805	1452.1
228.0	232.50	34.589 D	-0.088 C	27.808	1452.1
229.0	233.30	34.589 D	-0.086 C	27.808	1452.2
230.0	234.35	34.590 D	-0.085 C	27.809	1452.2
231.0	235.50	34.591 D	-0.084 C	27.809	1452.2
232.0	236.35	34.594 D	-0.083 C	27.811	1452.2
233.0	237.45	34.595 D	-0.082 C	27.812	1452.2
234.0	238.60	34.594 D	-0.080 C	27.811	1452.3
235.0	239.40	34.599 D	-0.081 C	27.815	1452.3
236.0	240.60	34.598 D	-0.079 C	27.815	1452.3
237.0	241.50	34.596 D	-0.077 C	27.812	1452.3
238.0	242.60	34.598 D	-0.076 C	27.814	1452.4
239.0	243.70	34.600 D	-0.074 C	27.815	1452.4
240.0	244.65	34.600 D	-0.074 C	27.816	1452.4
241.0	245.55	34.604 D	-0.074 C	27.819	1452.4
242.0	246.80	34.603 D	-0.072 C	27.818	1452.5
243.0	247.70	34.604 D	-0.071 C	27.819	1452.5
244.0	248.70	34.602 D	-0.069 C	27.817	1452.5
245.0	249.75	34.606 D	-0.070 C	27.820	1452.5
246.0	250.60	34.604 D	-0.068 C	27.819	1452.5
247.0	251.65	34.607 D	-0.068 C	27.821	1452.6
248.0	252.80	34.607 D	-0.068 C	27.821	1452.6
249.0	253.75	34.609 D	-0.067 C	27.822	1452.6
250.0	254.85	34.608 D	-0.065 C	27.822	1452.6
251.0	255.90	34.609 D	-0.065 C	27.823	1452.6
252.0	256.70	34.613 D	-0.066 C	27.826	1452.7
253.0	257.90	34.609 D	-0.062 C	27.822	1452.7
254.0	259.00	34.611 D	-0.062 C	27.824	1452.7
255.0	259.90	34.612 D	-0.061 C	27.825	1452.7
256.0	260.80	34.612 D	-0.060 C	27.825	1452.8
257.0	262.05	34.614 D	-0.060 C	27.827	1452.8
258.0	262.90	34.614 D	-0.058 C	27.827	1452.8
259.0	264.00	34.617 D	-0.058 C	27.828	1452.8
260.0	265.00	34.616 D	-0.057 C	27.828	1452.8
261.0	265.95	34.617 D	-0.057 C	27.829	1452.9
262.0	267.00	34.617 D	-0.055 C	27.829	1452.9
263.0	268.00	34.619 D	-0.055 C	27.830	1452.9
264.0	269.00	34.619 D	-0.055 C	27.830	1452.9
265.0	270.05	34.620 D	-0.054 C	27.831	1452.9
266.0	271.05	34.620 D	-0.052 C	27.831	1453.0
267.0	272.20	34.620 D	-0.051 C	27.830	1453.0
268.0	273.00	34.622 D	-0.052 C	27.832	1453.0
269.0	274.15	34.622 D	-0.050 C	27.832	1453.0
270.0	275.30	34.623 D	-0.051 C	27.834	1453.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
271.0	276.15	34.623 D	-0.050 C	27.833	1453.1
272.0	277.25	34.623 D	-0.049 C	27.833	1453.1
273.0	278.05	34.624 D	-0.048 C	27.834	1453.1
274.0	279.20	34.625 D	-0.048 C	27.835	1453.1
275.0	280.35	34.623 D	-0.046 C	27.833	1453.2
276.0	281.25	34.624 D	-0.046 C	27.834	1453.2
277.0	282.25	34.627 D	-0.046 C	27.836	1453.2
278.0	283.30	34.625 D	-0.043 C	27.835	1453.2
279.0	284.40	34.626 D	-0.043 C	27.835	1453.2
280.0	285.35	34.627 D	-0.043 C	27.836	1453.3
281.0	286.20	34.628 D	-0.043 C	27.837	1453.3
282.0	287.40	34.627 D	-0.043 C	27.836	1453.3
283.0	288.50	34.627 D	-0.041 C	27.836	1453.3
284.0	289.20	34.629 D	-0.042 C	27.838	1453.3
285.0	290.45	34.629 D	-0.041 C	27.838	1453.3
286.0	291.55	34.630 D	-0.041 C	27.838	1453.4
287.0	292.45	34.630 D	-0.040 C	27.838	1453.4
288.0	293.30	34.630 D	-0.040 C	27.839	1453.4
289.0	294.50	34.632 D	-0.039 C	27.839	1453.4
290.0	295.55	34.630 D	-0.038 C	27.838	1453.4
291.0	296.40	34.630 D	-0.037 C	27.838	1453.5
292.0	297.60	34.631 D	-0.038 C	27.839	1453.5
293.0	298.60	34.633 D	-0.037 C	27.840	1453.5
294.0	299.70	34.632 D	-0.037 C	27.840	1453.5
295.0	300.75	34.632 D	-0.035 C	27.840	1453.6
296.0	301.75	34.632 D	-0.036 C	27.840	1453.6
297.0	302.70	34.631 D	-0.034 C	27.839	1453.6
298.0	303.55	34.633 D	-0.035 C	27.841	1453.6
299.0	304.80	34.634 D	-0.035 C	27.841	1453.6
300.0	305.65	34.634 D	-0.032 C	27.841	1453.6
301.0	306.75	34.635 D	-0.032 C	27.842	1453.7
302.0	307.80	34.634 D	-0.032 C	27.841	1453.7
303.0	308.80	34.634 D	-0.031 C	27.841	1453.7
304.0	309.65	34.634 D	-0.030 C	27.841	1453.7
305.0	310.75	34.637 D	-0.032 C	27.843	1453.7
306.0	311.90	34.635 D	-0.031 C	27.842	1453.8
307.0	312.70	34.635 D	-0.030 C	27.842	1453.8
308.0	313.85	34.636 D	-0.030 C	27.842	1453.8
309.0	314.80	34.635 D	-0.030 C	27.842	1453.8
310.0	315.95	34.634 D	-0.030 C	27.841	1453.8
311.0	316.90	34.636 D	-0.029 C	27.842	1453.8
312.0	317.85	34.636 D	-0.029 C	27.843	1453.9
313.0	319.05	34.635 D	-0.028 C	27.841	1453.9
314.0	320.00	34.637 D	-0.028 C	27.843	1453.9
315.0	321.00	34.636 D	-0.028 C	27.843	1453.9
316.0	321.90	34.637 D	-0.028 C	27.844	1453.9
317.0	323.05	34.637 D	-0.027 C	27.843	1454.0
318.0	324.10	34.638 D	-0.027 C	27.844	1454.0
319.0	325.20	34.638 D	-0.027 C	27.844	1454.0
320.0	326.10	34.638 D	-0.027 C	27.844	1454.0
321.0	327.15	34.638 D	-0.025 C	27.844	1454.0
322.0	328.15	34.638 D	-0.026 C	27.844	1454.0
323.0	329.15	34.638 D	-0.024 C	27.844	1454.1
324.0	330.10	34.638 D	-0.024 C	27.844	1454.1
325.0	331.10	34.638 D	-0.025 C	27.844	1454.1
326.0	332.15	34.638 D	-0.024 C	27.844	1454.1
327.0	333.30	34.637 D	-0.024 C	27.843	1454.1
328.0	334.10	34.639 D	-0.023 C	27.844	1454.2
329.0	335.20	34.641 D	-0.024 C	27.846	1454.2
330.0	336.15	34.640 D	-0.024 C	27.846	1454.2
331.0	337.30	34.640 D	-0.023 C	27.845	1454.2
332.0	338.35	34.639 D	-0.023 C	27.845	1454.2
333.0	339.35	34.640 D	-0.022 C	27.846	1454.3
334.0	340.45	34.640 D	-0.021 C	27.845	1454.3
335.0	341.35	34.639 D	-0.021 C	27.845	1454.3
336.0	342.25	34.641 D	-0.022 C	27.847	1454.3
337.0	343.35	34.639 D	-0.019 C	27.844	1454.3
338.0	344.40	34.641 D	-0.020 C	27.846	1454.3
339.0	345.40	34.640 D	-0.019 C	27.846	1454.4

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
340.0	346.40	34.640 D	-0.018 C	27.845	1454.4
341.0	347.50	34.639 D	-0.019 C	27.845	1454.4
342.0	348.35	34.642 D	-0.019 C	27.847	1454.4
343.0	349.45	34.640 D	-0.017 C	27.845	1454.4
344.0	350.55	34.638 D	-0.016 C	27.844	1454.5
345.0	351.65	34.638 D	-0.015 C	27.843	1454.5
346.0	352.55	34.641 D	-0.016 C	27.846	1454.5
347.0	353.60	34.641 D	-0.016 C	27.846	1454.5
348.0	354.75	34.639 D	-0.015 C	27.844	1454.5
349.0	355.60	34.640 D	-0.016 C	27.845	1454.5
350.0	356.65	34.640 D	-0.016 C	27.845	1454.6
351.0	357.60	34.642 D	-0.017 C	27.847	1454.6
352.0	358.50	34.642 D	-0.017 C	27.847	1454.6
353.0	359.75	34.640 D	-0.015 C	27.845	1454.6
354.0	360.70	34.640 D	-0.015 C	27.845	1454.6
355.0	361.60	34.644 D	-0.018 C	27.849	1454.6
356.0	362.80	34.640 D	-0.014 C	27.845	1454.7
357.0	363.75	34.640 D	-0.013 C	27.845	1454.7
358.0	364.75	34.641 D	-0.014 C	27.846	1454.7
359.0	365.80	34.640 D	-0.013 C	27.845	1454.7
360.0	366.75	34.640 D	-0.013 C	27.845	1454.7
361.0	367.85	34.644 D	-0.015 C	27.848	1454.8
362.0	368.95	34.640 D	-0.012 C	27.845	1454.8
363.0	369.95	34.641 D	-0.012 C	27.846	1454.8
364.0	370.95	34.640 D	-0.012 C	27.845	1454.8
365.0	371.95	34.641 D	-0.012 C	27.846	1454.8
366.0	373.05	34.641 D	-0.011 C	27.846	1454.9
367.0	374.05	34.642 D	-0.011 C	27.846	1454.9
368.0	374.95	34.641 D	-0.011 C	27.846	1454.9
369.0	376.00	34.639 D	-0.010 C	27.844	1454.9
370.0	377.15	34.639 D	-0.009 C	27.844	1454.9
371.0	378.05	34.641 D	-0.010 C	27.846	1454.9
372.0	378.90	34.641 D	-0.009 C	27.846	1455.0
373.0	380.05	34.640 D	-0.009 C	27.845	1455.0
374.0	381.10	34.641 D	-0.009 C	27.846	1455.0
375.0	382.10	34.641 D	-0.009 C	27.845	1455.0
376.0	383.10	34.641 D	-0.009 C	27.846	1455.0
377.0	384.10	34.642 D	-0.009 C	27.847	1455.1
378.0	385.15	34.642 D	-0.009 C	27.846	1455.1
379.0	386.15	34.640 D	-0.008 C	27.845	1455.1
380.0	387.15	34.641 D	-0.008 C	27.845	1455.1
381.0	388.30	34.640 D	-0.007 C	27.845	1455.1
382.0	389.10	34.642 D	-0.008 C	27.847	1455.1
383.0	390.25	34.639 D	-0.006 C	27.844	1455.2
384.0	391.10	34.640 D	-0.007 C	27.845	1455.2
385.0	392.20	34.640 D	-0.006 C	27.844	1455.2
386.0	393.35	34.641 D	-0.006 C	27.845	1455.2
387.0	394.25	34.641 D	-0.007 C	27.846	1455.2
388.0	395.15	34.641 D	-0.007 C	27.845	1455.2
389.0	396.25	34.642 D	-0.006 C	27.846	1455.3
390.0	397.25	34.642 D	-0.007 C	27.846	1455.3
391.0	398.40	34.641 D	-0.005 C	27.845	1455.3
392.0	399.30	34.641 D	-0.006 C	27.846	1455.3
393.0	400.50	34.641 D	-0.005 C	27.845	1455.3
394.0	401.55	34.640 D	-0.005 C	27.845	1455.4
395.0	402.50	34.640 D	-0.005 C	27.844	1455.4
396.0	403.35	34.642 D	-0.006 C	27.846	1455.4
397.0	404.35	34.640 D	-0.005 C	27.845	1455.4
398.0	405.55	34.640 D	-0.004 C	27.844	1455.4
399.0	406.65	34.639 D	-0.004 C	27.844	1455.4
400.0	407.50	34.641 D	-0.004 C	27.846	1455.5
401.0	408.40	34.641 D	-0.004 C	27.845	1455.5
402.0	409.55	34.643 D	-0.005 C	27.847	1455.5
403.0	410.60	34.641 D	-0.004 C	27.845	1455.5
404.0	411.60	34.642 D	-0.004 C	27.846	1455.5
405.0	412.50	34.642 D	-0.005 C	27.847	1455.5
406.0	413.60	34.641 D	-0.003 C	27.845	1455.6
407.0	414.75	34.640 D	-0.003 C	27.845	1455.6
408.0	415.75	34.641 D	-0.003 C	27.845	1455.6



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
409.0	416.85	34.639 D	-0.002 C	27.844	1455.6
410.0	417.75	34.641 D	-0.003 C	27.846	1455.6
411.0	418.90	34.642 D	-0.003 C	27.846	1455.7
412.0	419.80	34.642 D	-0.003 C	27.846	1455.7
413.0	420.60	34.643 D	-0.003 C	27.847	1455.7
414.0	421.85	34.642 D	-0.003 C	27.846	1455.7
415.0	422.65	34.642 D	-0.002 C	27.846	1455.7
416.0	423.70	34.642 D	-0.003 C	27.846	1455.7
417.0	424.75	34.642 D	-0.002 C	27.846	1455.8
418.0	425.85	34.641 D	-0.002 C	27.845	1455.8
419.0	426.85	34.642 D	-0.002 C	27.846	1455.8
420.0	427.90	34.641 D	-0.002 C	27.846	1455.8
421.0	428.95	34.643 D	-0.003 C	27.847	1455.8
422.0	429.95	34.641 D	-0.001 C	27.845	1455.8
423.0	431.00	34.639 D	0.001 C	27.844	1455.9
424.0	431.85	34.642 D	-0.002 C	27.846	1455.9
425.0	433.05	34.643 D	-0.002 C	27.847	1455.9
426.0	434.05	34.641 D	0.0 C	27.845	1455.9
427.0	435.05	34.643 D	-0.002 C	27.847	1455.9
428.0	435.95	34.642 D	0.0 C	27.846	1455.9
429.0	437.10	34.644 D	-0.001 C	27.847	1456.0
430.0	438.15	34.640 D	0.0 C	27.845	1456.0
431.0	438.95	34.643 D	0.0 C	27.847	1456.0
432.0	439.95	34.644 D	0.0 C	27.847	1456.0
433.0	441.10	34.642 D	0.0 C	27.846	1456.0
434.0	442.05	34.642 D	0.0 C	27.846	1456.0
435.0	443.20	34.642 D	0.0 C	27.846	1456.1
436.0	444.20	34.644 D	0.0 C	27.848	1456.1
437.0	445.15	34.643 D	0.0 C	27.847	1456.1
438.0	446.10	34.643 D	0.0 C	27.847	1456.1
439.0	447.40	34.641 D	0.002 C	27.845	1456.1
440.0	448.30	34.641 D	0.002 C	27.845	1456.2
441.0	449.30	34.640 D	0.003 C	27.845	1456.2
442.0	450.20	34.641 D	0.002 C	27.845	1456.2
443.0	451.35	34.642 D	0.002 C	27.846	1456.2
444.0	452.35	34.642 D	0.003 C	27.845	1456.2
445.0	453.20	34.644 D	0.002 C	27.847	1456.2
446.0	454.45	34.643 D	0.003 C	27.847	1456.3
447.0	455.50	34.643 D	0.004 C	27.846	1456.3
448.0	456.45	34.642 D	0.004 C	27.846	1456.3
449.0	457.45	34.642 D	0.004 C	27.846	1456.3
450.0	458.50	34.641 D	0.004 C	27.845	1456.3
451.0	459.50	34.643 D	0.003 C	27.847	1456.3
452.0	460.50	34.641 D	0.004 C	27.845	1456.4
453.0	461.35	34.643 D	0.003 C	27.847	1456.4
454.0	462.50	34.643 D	0.003 C	27.846	1456.4
455.0	463.55	34.645 D	0.002 C	27.848	1456.4
456.0	464.60	34.642 D	0.004 C	27.846	1456.4
457.0	465.60	34.641 D	0.004 C	27.845	1456.4
458.0	466.50	34.643 D	0.003 C	27.847	1456.5
459.0	467.55	34.644 D	0.003 C	27.847	1456.5
460.0	468.45	34.641 D	0.004 C	27.845	1456.5



TEMPERATURE, C

△ -2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00

SALINITY 0/00

□ 24.00 26.00 28.00 30.00 32.00 34.00 36.00

SIGMAT

\* 19.00 21.00 23.00 25.00 27.00 29.00 31.00

DEPTH M



CRUISE 15-76-015

D'IBERVILLE FIORD-76

EXPER NO. 2015

LAT N.80-35-30

LONG W.78-44-00

WATER DEPTH 375

DEPTH INCR.

DATE 140376

LOCAL TIME 1500

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
3.0	1.60		-1.625 D		
4.0	2.70	30.358 E	-1.624 D	24.438	1435.3
5.0	3.60	30.356 E	-1.624 D	24.436	1435.3
6.0	4.50	30.353 E	-1.623 D	24.434	1435.3
7.0	5.75	30.355 E	-1.624 D	24.435	1435.3
8.0	6.70	30.355 E	-1.624 D	24.435	1435.3
9.0	7.55	30.354 E	-1.623 D	24.435	1435.3
10.0	8.75	30.354 E	-1.623 D	24.434	1435.4
11.0	9.70	30.353 E	-1.624 D	24.434	1435.4
12.0	10.65	30.353 E	-1.623 D	24.433	1435.4
13.0	11.65	30.353 E	-1.622 D	24.433	1435.4
14.0	12.75	30.355 E	-1.622 D	24.435	1435.4
15.0	13.80	30.356 E	-1.609 D	24.436	1435.5
16.0	14.65	30.384 E	-1.029 D	24.448	1438.3
17.0	15.60	30.498 E	-0.900 D	24.536	1439.1
18.0	16.80	30.621 E	-0.883 D	24.635	1439.4
19.0	17.85	30.761 E	-0.895 D	24.749	1439.5
20.0	18.70	30.883 E	-0.860 D	24.846	1439.9
21.0	19.70	30.962 E	-0.834 D	24.910	1440.1
22.0	20.80	31.041 E	-0.806 D	24.973	1440.4
23.0	21.95	31.114 E	-0.794 D	25.031	1440.6
24.0	22.95	31.186 E	-0.794 D	25.089	1440.7
25.0	23.80	31.261 E	-0.801 D	25.151	1440.8
26.0	24.85	31.357 E	-0.812 D	25.228	1440.9
27.0	25.90	31.439 E	-0.794 D	25.294	1441.1
28.0	26.90	31.526 E	-0.794 D	25.364	1441.2
29.0	27.85	31.604 E	-0.825 D	25.428	1441.2
30.0	29.00	31.697 E	-0.857 D	25.504	1441.2
31.0	29.90	31.774 E	-0.904 D	25.567	1441.1
32.0	30.80	31.848 E	-0.946 D	25.628	1441.0
33.0	32.00	31.923 E	-0.990 D	25.690	1440.9
34.0	33.05	31.984 E	-1.032 D	25.741	1440.8
35.0	33.85	32.020 E	-1.060 D	25.771	1440.8
36.0	34.95	32.069 E	-1.093 D	25.812	1440.7
37.0	36.05	32.103 E	-1.120 D	25.840	1440.6
38.0	37.00	32.150 E	-1.155 D	25.879	1440.6
39.0	38.05	32.205 E	-1.194 D	25.924	1440.5
40.0	39.00	32.255 E	-1.242 D	25.966	1440.3
41.0	40.10	32.301 E	-1.278 D	26.004	1440.2
42.0	41.05	32.328 E	-1.279 D	26.025	1440.3
43.0	42.00	32.367 E	-1.293 D	26.058	1440.3
44.0	43.15	32.395 E	-1.306 D	26.081	1440.3
45.0	44.10	32.427 E	-1.325 D	26.107	1440.3
46.0	45.15	32.465 E	-1.338 D	26.138	1440.3
47.0	46.05	32.515 E	-1.359 D	26.179	1440.3
48.0	47.15	32.566 E	-1.381 D	26.221	1440.2
49.0	48.25	32.616 E	-1.416 D	26.262	1440.2
50.0	49.05	32.649 E	-1.423 D	26.290	1440.2
51.0	50.25	32.685 E	-1.425 D	26.318	1440.3
52.0	51.25	32.726 E	-1.424 D	26.352	1440.3
53.0	52.15	32.763 E	-1.418 D	26.381	1440.4
54.0	53.20	32.795 E	-1.414 D	26.407	1440.5
55.0	54.25	32.827 E	-1.416 D	26.434	1440.6
56.0	55.25	32.852 E	-1.420 D	26.453	1440.6
57.0	56.25	32.879 E	-1.413 D	26.475	1440.7
58.0	57.35	32.911 E	-1.409 D	26.501	1440.8
59.0	58.25	32.931 E	-1.409 D	26.517	1440.8
60.0	59.25	32.954 E	-1.406 D	26.536	1440.9
61.0	60.40	32.983 E	-1.401 D	26.559	1441.0
62.0	61.35	33.013 E	-1.394 D	26.583	1441.0
63.0	62.40	33.031 E	-1.392 D	26.598	1441.1
64.0	63.35	33.053 E	-1.390 D	26.616	1441.1

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
65.0	64.50	33.074 E	-1.383 D	26.633	1441.2
66.0	65.40	33.099 E	-1.379 D	26.652	1441.3
67.0	66.30	33.120 E	-1.377 D	26.669	1441.4
68.0	67.45	33.139 E	-1.375 D	26.685	1441.4
69.0	68.45	33.157 E	-1.367 D	26.700	1441.5
70.0	69.35	33.181 E	-1.375 D	26.719	1441.5
71.0	70.50	33.206 E	-1.341 D	26.738	1441.7
72.0	71.55	33.232 E	-1.335 D	26.759	1441.8
73.0	72.50	33.248 E	-1.343 D	26.772	1441.8
74.0	73.45	33.264 E	-1.337 D	26.785	1441.9
75.0	74.60	33.277 E	-1.337 D	26.796	1441.9
76.0	75.55	33.293 E	-1.319 D	26.808	1442.0
77.0	76.50	33.319 E	-1.344 D	26.830	1442.0
78.0	77.50	33.330 E	-1.341 D	26.838	1442.0
79.0	78.65	33.349 E	-1.307 D	26.853	1442.2
80.0	79.75	33.365 E	-1.284 D	26.866	1442.4
81.0	80.65	33.395 E	-1.294 D	26.890	1442.4
82.0	81.55	33.425 E	-1.345 D	26.915	1442.2
83.0	82.60	33.437 E	-1.286 D	26.923	1442.5
84.0	83.70	33.466 E	-1.301 D	26.948	1442.5
85.0	84.70	33.478 E	-1.244 D	26.956	1442.8
86.0	85.60	33.497 E	-1.222 D	26.971	1442.9
87.0	86.70	33.510 E	-1.217 D	26.981	1443.0
88.0	87.75	33.529 E	-1.250 D	26.997	1442.9
89.0	88.95	33.547 E	-1.230 D	27.011	1443.0
90.0	89.85	33.566 E	-1.220 D	27.026	1443.1
91.0	90.85	33.583 E	-1.208 D	27.040	1443.2
92.0	91.85	33.596 E	-1.096 D	27.046	1443.8
93.0	92.95	33.631 E	-1.090 D	27.074	1443.9
94.0	93.95	33.643 E	-1.052 D	27.083	1444.1
95.0	94.85	33.663 E	-1.058 D	27.099	1444.1
96.0	95.80	33.677 E	-1.046 D	27.110	1444.2
97.0	96.85	33.691 E	-1.046 D	27.121	1444.2
98.0	97.95	33.702 E	-1.015 D	27.130	1444.4
99.0	98.90	33.715 E	-0.963 D	27.138	1444.7
100.0	99.80	33.735 E	-0.947 D	27.154	1444.8
101.0	100.85	33.746 D	-0.925 C	27.162	1444.9
102.0	102.05	33.764 D	-0.905 C	27.176	1445.1
103.0	102.95	33.774 D	-0.886 C	27.183	1445.2
104.0	104.00	33.786 D	-0.877 C	27.194	1445.3
105.0	105.05	33.798 D	-0.864 C	27.202	1445.3
106.0	105.95	33.809 D	-0.855 C	27.211	1445.4
107.0	106.95	33.820 D	-0.842 C	27.219	1445.5
108.0	108.10	33.833 D	-0.832 C	27.229	1445.6
109.0	109.05	33.844 D	-0.822 C	27.238	1445.7
110.0	110.00	33.856 D	-0.813 C	27.247	1445.7
111.0	111.00	33.865 D	-0.802 C	27.254	1445.8
112.0	112.15	33.873 D	-0.792 C	27.260	1445.9
113.0	113.20	33.884 D	-0.782 C	27.269	1446.0
114.0	114.05	33.895 D	-0.772 C	27.277	1446.1
115.0	115.15	33.905 D	-0.760 C	27.285	1446.1
116.0	116.25	33.918 D	-0.749 C	27.295	1446.2
117.0	117.15	33.927 D	-0.742 C	27.302	1446.3
118.0	118.25	33.933 D	-0.736 C	27.307	1446.3
119.0	119.10	33.939 D	-0.730 C	27.311	1446.4
120.0	120.30	33.948 D	-0.722 C	27.318	1446.5
121.0	121.35	33.956 D	-0.714 C	27.324	1446.5
122.0	122.15	33.965 D	-0.706 C	27.331	1446.6
123.0	123.25	33.975 D	-0.698 C	27.339	1446.7
124.0	124.15	33.981 D	-0.690 C	27.344	1446.7
125.0	125.35	33.987 D	-0.684 C	27.348	1446.8
126.0	126.40	33.993 D	-0.682 C	27.352	1446.8
127.0	127.40	33.999 D	-0.675 C	27.357	1446.9
128.0	128.40	34.008 D	-0.668 C	27.364	1446.9
129.0	129.30	34.014 D	-0.660 C	27.369	1447.0
130.0	130.35	34.023 D	-0.653 C	27.376	1447.1
131.0	131.35	34.032 D	-0.646 C	27.383	1447.1
132.0	132.30	34.038 D	-0.640 C	27.387	1447.2
133.0	133.50	34.046 D	-0.633 C	27.394	1447.2



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
134.0	134.40	34.054 D	-0.626 C	27.400	1447.3
135.0	135.60	34.061 D	-0.620 C	27.405	1447.3
136.0	136.50	34.069 D	-0.613 C	27.411	1447.4
137.0	137.60	34.075 D	-0.608 C	27.416	1447.5
138.0	138.55	34.082 D	-0.602 C	27.422	1447.5
139.0	139.50	34.088 D	-0.597 C	27.426	1447.6
140.0	140.55	34.094 D	-0.591 C	27.430	1447.6
141.0	141.50	34.099 D	-0.586 C	27.435	1447.7
142.0	142.60	34.102 D	-0.582 C	27.437	1447.7
143.0	143.60	34.105 D	-0.580 C	27.440	1447.7
144.0	144.55	34.112 D	-0.576 C	27.445	1447.8
145.0	145.65	34.119 D	-0.564 C	27.450	1447.9
146.0	146.70	34.129 D	-0.560 C	27.458	1447.9
147.0	147.75	34.136 D	-0.549 C	27.463	1448.0
148.0	148.70	34.144 D	-0.544 C	27.469	1448.0
149.0	149.80	34.149 D	-0.540 C	27.473	1448.1
150.0	150.70	34.155 D	-0.533 C	27.478	1448.1
151.0	151.80	34.161 D	-0.527 C	27.482	1448.2
152.0	152.60	34.166 D	-0.522 C	27.486	1448.2
153.0	153.70	34.173 D	-0.518 C	27.491	1448.3
154.0	154.70	34.177 D	-0.511 C	27.495	1448.3
155.0	155.65	34.184 D	-0.506 C	27.500	1448.4
156.0	156.80	34.193 D	-0.500 C	27.507	1448.4
157.0	157.70	34.199 D	-0.493 C	27.511	1448.5
158.0	158.85	34.205 D	-0.489 C	27.516	1448.5
159.0	159.85	34.212 D	-0.482 C	27.522	1448.6
160.0	160.85	34.219 D	-0.473 C	27.527	1448.7
161.0	161.90	34.227 D	-0.463 C	27.533	1448.7
162.0	162.85	34.234 D	-0.459 C	27.538	1448.8
163.0	163.90	34.239 D	-0.454 C	27.542	1448.8
164.0	164.75	34.247 D	-0.447 C	27.548	1448.9
165.0	165.95	34.263 D	-0.430 C	27.560	1449.0
166.0	166.95	34.271 D	-0.419 C	27.567	1449.1
167.0	167.95	34.282 D	-0.411 C	27.575	1449.2
168.0	168.95	34.287 D	-0.407 C	27.579	1449.2
169.0	170.00	34.290 D	-0.405 C	27.581	1449.2
170.0	171.10	34.296 D	-0.403 C	27.585	1449.3
171.0	172.00	34.303 D	-0.395 C	27.591	1449.3
172.0	173.10	34.312 D	-0.383 C	27.598	1449.4
173.0	173.95	34.322 D	-0.377 C	27.606	1449.5
174.0	175.05	34.322 D	-0.374 C	27.606	1449.5
175.0	175.90	34.332 D	-0.363 C	27.614	1449.6
176.0	177.05	34.339 D	-0.359 C	27.618	1449.6
177.0	178.20	34.352 D	-0.342 C	27.628	1449.7
178.0	179.20	34.357 D	-0.337 C	27.632	1449.8
179.0	180.20	34.364 D	-0.332 C	27.638	1449.8
180.0	181.05	34.366 D	-0.332 C	27.640	1449.9
181.0	182.25	34.371 D	-0.325 C	27.643	1449.9
182.0	183.10	34.378 D	-0.317 C	27.649	1450.0
183.0	184.35	34.385 D	-0.312 C	27.654	1450.0
184.0	185.25	34.388 D	-0.306 C	27.656	1450.1
185.0	186.30	34.401 D	-0.295 C	27.665	1450.2
186.0	187.15	34.413 D	-0.277 C	27.674	1450.3
187.0	188.30	34.417 D	-0.274 C	27.678	1450.3
188.0	189.20	34.423 D	-0.272 C	27.683	1450.3
189.0	190.40	34.427 D	-0.261 C	27.685	1450.4
190.0	191.40	34.435 D	-0.256 C	27.692	1450.5
191.0	192.20	34.443 D	-0.248 C	27.697	1450.5
192.0	193.35	34.448 D	-0.243 C	27.701	1450.6
193.0	194.35	34.453 D	-0.236 C	27.705	1450.6
194.0	195.45	34.460 D	-0.229 C	27.710	1450.7
195.0	196.45	34.464 D	-0.222 C	27.713	1450.7
196.0	197.45	34.474 D	-0.216 C	27.721	1450.8
197.0	198.40	34.481 D	-0.205 C	27.726	1450.9
198.0	199.50	34.498 D	-0.198 C	27.740	1451.0
199.0	200.50	34.504 D	-0.185 C	27.744	1451.0
200.0	201.50	34.514 D	-0.175 C	27.751	1451.1
201.0	202.55	34.523 D	-0.168 C	27.758	1451.2
202.0	203.65	34.527 D	-0.160 C	27.761	1451.2

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
203.0	204.60	34.536 D	-0.154 C	27.768	1451.3
204.0	205.60	34.540 D	-0.148 C	27.771	1451.3
205.0	206.45	34.544 D	-0.142 C	27.774	1451.4
206.0	207.60	34.549 D	-0.138 C	27.778	1451.4
207.0	208.70	34.552 D	-0.131 C	27.780	1451.5
208.0	209.65	34.555 D	-0.129 C	27.782	1451.5
209.0	210.70	34.559 D	-0.128 C	27.785	1451.5
210.0	211.75	34.561 D	-0.123 C	27.787	1451.6
211.0	212.60	34.563 D	-0.120 C	27.788	1451.6
212.0	213.55	34.565 D	-0.119 C	27.790	1451.6
213.0	214.75	34.566 D	-0.115 C	27.790	1451.7
214.0	215.75	34.568 D	-0.110 C	27.792	1451.7
215.0	216.60	34.574 D	-0.108 C	27.796	1451.8
216.0	217.85	34.577 D	-0.106 C	27.798	1451.8
217.0	218.75	34.577 D	-0.102 C	27.799	1451.8
218.0	219.80	34.579 D	-0.100 C	27.800	1451.9
219.0	220.80	34.583 D	-0.098 C	27.803	1451.9
220.0	221.90	34.585 D	-0.097 C	27.805	1451.9
221.0	222.75	34.584 D	-0.095 C	27.804	1451.9
222.0	224.00	34.587 D	-0.094 C	27.806	1452.0
223.0	224.90	34.587 D	-0.092 C	27.806	1452.0
224.0	225.80	34.590 D	-0.092 C	27.809	1452.0
225.0	226.90	34.588 D	-0.088 C	27.807	1452.0
226.0	227.85	34.589 D	-0.087 C	27.808	1452.1
227.0	229.10	34.592 D	-0.086 C	27.810	1452.1
228.0	230.00	34.593 D	-0.085 C	27.811	1452.1
229.0	230.90	34.594 D	-0.084 C	27.811	1452.1
230.0	232.00	34.595 D	-0.083 C	27.812	1452.2
231.0	232.90	34.596 D	-0.082 C	27.813	1452.2
232.0	234.05	34.596 D	-0.080 C	27.813	1452.2
233.0	234.90	34.597 D	-0.077 C	27.813	1452.2
234.0	236.05	34.599 D	-0.076 C	27.815	1452.3
235.0	237.00	34.601 D	-0.076 C	27.817	1452.3
236.0	238.05	34.600 D	-0.074 C	27.816	1452.3
237.0	239.05	34.602 D	-0.074 C	27.818	1452.3
238.0	240.00	34.603 D	-0.073 C	27.818	1452.3
239.0	241.05	34.605 D	-0.074 C	27.820	1452.4
240.0	242.20	34.606 D	-0.073 C	27.821	1452.4
241.0	243.10	34.607 D	-0.073 C	27.822	1452.4
242.0	244.00	34.606 D	-0.071 C	27.820	1452.4
243.0	245.10	34.610 D	-0.070 C	27.824	1452.4
244.0	246.25	34.607 D	-0.067 C	27.821	1452.5
245.0	247.15	34.608 D	-0.066 C	27.822	1452.5
246.0	248.10	34.610 D	-0.067 C	27.824	1452.5
247.0	249.20	34.610 D	-0.066 C	27.824	1452.5
248.0	250.30	34.611 D	-0.065 C	27.824	1452.6
249.0	251.20	34.610 D	-0.063 C	27.823	1452.6
250.0	252.25	34.613 D	-0.063 C	27.826	1452.6
251.0	253.35	34.613 D	-0.061 C	27.826	1452.6
252.0	254.35	34.613 D	-0.060 C	27.826	1452.6
253.0	255.30	34.614 D	-0.059 C	27.827	1452.7
254.0	256.40	34.615 D	-0.059 C	27.827	1452.7
255.0	257.50	34.616 D	-0.058 C	27.828	1452.7
256.0	258.50	34.618 D	-0.059 C	27.830	1452.7
257.0	259.45	34.617 D	-0.057 C	27.828	1452.8
258.0	260.50	34.619 D	-0.057 C	27.830	1452.8
259.0	261.55	34.619 D	-0.056 C	27.830	1452.8
260.0	262.55	34.618 D	-0.055 C	27.830	1452.8
261.0	263.55	34.619 D	-0.054 C	27.830	1452.8
262.0	264.50	34.622 D	-0.054 C	27.832	1452.9
263.0	265.55	34.621 D	-0.053 C	27.832	1452.9
264.0	266.55	34.623 D	-0.052 C	27.833	1452.9
265.0	267.50	34.623 D	-0.053 C	27.833	1452.9
266.0	268.45	34.623 D	-0.052 C	27.833	1452.9
267.0	269.60	34.623 D	-0.051 C	27.833	1453.0
268.0	270.65	34.624 D	-0.050 C	27.834	1453.0
269.0	271.55	34.625 D	-0.050 C	27.834	1453.0
270.0	272.55	34.625 D	-0.050 C	27.835	1453.0
271.0	273.70	34.625 D	-0.049 C	27.835	1453.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
272.0	274.75	34.625 D	-0.047 C	27.835	1453.1
273.0	275.70	34.627 D	-0.048 C	27.836	1453.1
274.0	276.80	34.627 D	-0.046 C	27.836	1453.1
275.0	277.85	34.628 D	-0.045 C	27.837	1453.1
276.0	278.60	34.626 D	-0.044 C	27.836	1453.1
277.0	279.65	34.628 D	-0.045 C	27.837	1453.2
278.0	280.85	34.629 D	-0.044 C	27.838	1453.2
279.0	281.80	34.628 D	-0.042 C	27.837	1453.2
280.0	282.65	34.629 D	-0.042 C	27.838	1453.2
281.0	283.80	34.631 D	-0.043 C	27.839	1453.2
282.0	284.90	34.631 D	-0.042 C	27.839	1453.3
283.0	285.75	34.630 D	-0.041 C	27.839	1453.3
284.0	286.85	34.633 D	-0.041 C	27.840	1453.3
285.0	288.00	34.632 D	-0.040 C	27.840	1453.3
286.0	288.80	34.633 D	-0.040 C	27.841	1453.3
287.0	289.95	34.634 D	-0.040 C	27.841	1453.4
288.0	291.00	34.632 D	-0.038 C	27.840	1453.4
289.0	291.85	34.633 D	-0.039 C	27.841	1453.4
290.0	293.05	34.634 D	-0.039 C	27.841	1453.4
291.0	294.00	34.633 D	-0.038 C	27.841	1453.4
292.0	295.05	34.633 D	-0.037 C	27.841	1453.4
293.0	296.00	34.635 D	-0.037 C	27.843	1453.5
294.0	297.10	34.634 D	-0.035 C	27.841	1453.5
295.0	297.95	34.635 D	-0.035 C	27.842	1453.5
296.0	299.15	34.634 D	-0.035 C	27.841	1453.5
297.0	300.10	34.635 D	-0.035 C	27.842	1453.5
298.0	301.00	34.636 D	-0.034 C	27.843	1453.6
299.0	302.25	34.636 D	-0.034 C	27.842	1453.6
300.0	303.05	34.638 D	-0.035 C	27.844	1453.6
301.0	304.15	34.637 D	-0.034 C	27.844	1453.6
302.0	305.25	34.636 D	-0.032 C	27.843	1453.6
303.0	306.10	34.636 D	-0.033 C	27.843	1453.7
304.0	307.10	34.638 D	-0.032 C	27.844	1453.7
305.0	308.30	34.638 D	-0.032 C	27.845	1453.7
306.0	309.15	34.638 D	-0.031 C	27.844	1453.7
307.0	310.10	34.636 D	-0.030 C	27.843	1453.7
308.0	311.30	34.637 D	-0.030 C	27.844	1453.8
309.0	312.40	34.638 D	-0.030 C	27.844	1453.8
310.0	313.30	34.638 D	-0.029 C	27.844	1453.8
311.0	314.25	34.639 D	-0.029 C	27.845	1453.8
312.0	315.40	34.638 D	-0.028 C	27.844	1453.8
313.0	316.40	34.639 D	-0.028 C	27.845	1453.8
314.0	317.35	34.639 D	-0.027 C	27.845	1453.9
315.0	318.30	34.640 D	-0.027 C	27.845	1453.9
316.0	319.40	34.639 D	-0.027 C	27.845	1453.9
317.0	320.40	34.640 D	-0.027 C	27.846	1453.9
318.0	321.35	34.639 D	-0.027 C	27.845	1453.9
319.0	322.35	34.642 D	-0.027 C	27.847	1454.0
320.0	323.50	34.642 D	-0.027 C	27.848	1454.0
321.0	324.50	34.641 D	-0.026 C	27.846	1454.0
322.0	325.55	34.640 D	-0.025 C	27.846	1454.0
323.0	326.65	34.641 D	-0.025 C	27.846	1454.0
324.0	327.55	34.641 D	-0.024 C	27.846	1454.1
325.0	328.40	34.641 D	-0.025 C	27.847	1454.1
326.0	329.45	34.642 D	-0.025 C	27.847	1454.1
327.0	330.65	34.642 D	-0.024 C	27.847	1454.1
328.0	331.65	34.642 D	-0.023 C	27.847	1454.1
329.0	332.50	34.643 D	-0.023 C	27.847	1454.1
330.0	333.65	34.643 D	-0.024 C	27.848	1454.2
331.0	334.75	34.640 D	-0.022 C	27.845	1454.2
332.0	335.70	34.641 D	-0.022 C	27.846	1454.2
333.0	336.70	34.643 D	-0.022 C	27.848	1454.2
334.0	337.75	34.643 D	-0.022 C	27.848	1454.2
335.0	338.75	34.642 D	-0.022 C	27.847	1454.2
336.0	339.75	34.642 D	-0.021 C	27.847	1454.3
337.0	340.80	34.644 D	-0.022 C	27.848	1454.3
338.0	341.80	34.643 D	-0.021 C	27.848	1454.3
339.0	342.85	34.642 D	-0.020 C	27.847	1454.3
340.0	343.85	34.643 D	-0.019 C	27.848	1454.3



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
341.0	344.90	34.643 D	-0.020 C	27.848	1454.4
342.0	345.75	34.643 D	-0.019 C	27.848	1454.4
343.0	346.90	34.645 D	-0.020 C	27.849	1454.4
344.0	347.85	34.643 D	-0.019 C	27.848	1454.4
345.0	348.80	34.645 D	-0.020 C	27.850	1454.4
346.0	350.00	34.643 D	-0.017 C	27.847	1454.5
347.0	350.80	34.644 D	-0.017 C	27.848	1454.5
348.0	352.05	34.644 D	-0.017 C	27.849	1454.5
349.0	353.00	34.642 D	-0.014 C	27.846	1454.5
350.0	354.05	34.642 D	-0.016 C	27.847	1454.5



TEMPERATURE, C

-2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00

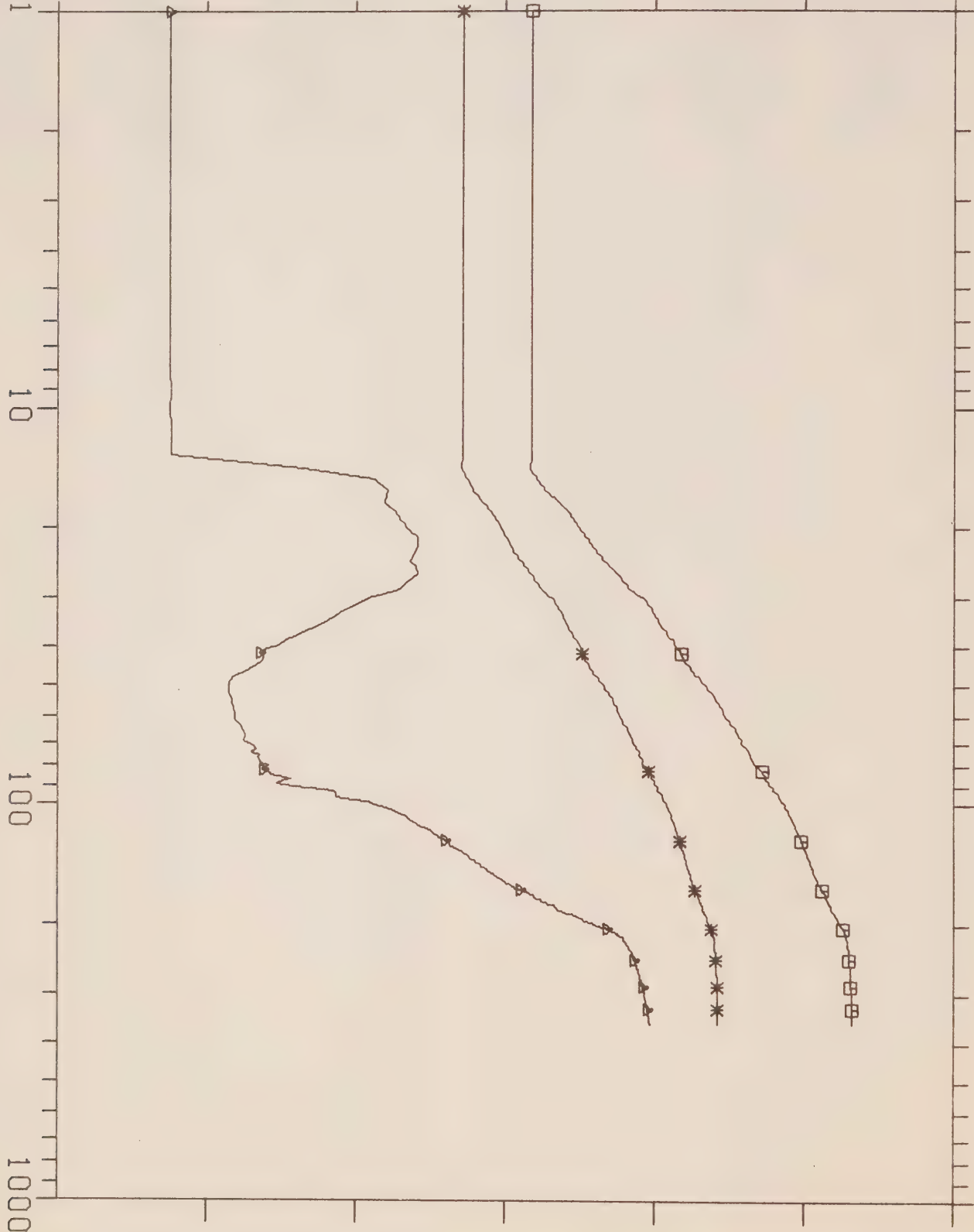
SALINITY 0/00

24.00 26.00 28.00 30.00 32.00 34.00 36.00

SIGMAT

19.00 21.00 23.00 25.00 27.00 29.00 31.00

DEPTH M



EXPERIMENT 2016



CRUISE 15-76-015

D'IBERVILLE FIORD-76

EXPER NO. 2016

LAT N.80-35-30

LONG W.78-44-00

WATER DEPTH 375

DEPTH INCR.

DATE 140376

LOCAL TIME 1555

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
3.0	1.00	30.368 E	-1.624 D	24.446	1435.3
4.0	1.95	30.359 E	-1.623 D	24.439	1435.3
5.0	2.95	30.355 E	-1.624 D	24.435	1435.3
6.0	4.00	30.354 E	-1.623 D	24.434	1435.3
7.0	4.95	30.354 E	-1.624 D	24.434	1435.3
8.0	5.90	30.354 E	-1.624 D	24.434	1435.3
9.0	6.95	30.352 E	-1.623 D	24.433	1435.3
10.0	8.05	30.353 E	-1.623 D	24.433	1435.3
11.0	9.15	30.353 E	-1.622 D	24.433	1435.4
12.0	10.15	30.352 E	-1.623 D	24.433	1435.4
13.0	11.10	30.352 E	-1.622 D	24.432	1435.4
14.0	12.15	30.353 E	-1.620 D	24.434	1435.4
15.0	13.15	30.353 E	-1.620 D	24.433	1435.4
16.0	14.15	30.348 E	-1.175 D	24.422	1437.6
17.0	15.10	30.447 E	-0.934 D	24.496	1438.9
18.0	16.15	30.561 E	-0.888 D	24.588	1439.3
19.0	17.25	30.732 E	-0.893 D	24.726	1439.5
20.0	18.25	30.856 E	-0.867 D	24.825	1439.8
21.0	19.20	30.938 E	-0.847 D	24.891	1440.0
22.0	20.15	31.017 E	-0.820 D	24.953	1440.3
23.0	21.10	31.102 E	-0.790 D	25.021	1440.5
24.0	22.15	31.180 E	-0.792 D	25.084	1440.7
25.0	23.20	31.260 E	-0.801 D	25.150	1440.8
26.0	24.10	31.342 E	-0.814 D	25.216	1440.8
27.0	25.10	31.426 E	-0.795 D	25.283	1441.0
28.0	26.20	31.514 E	-0.792 D	25.354	1441.2
29.0	27.35	31.605 E	-0.824 D	25.428	1441.2
30.0	28.40	31.684 E	-0.848 D	25.493	1441.2
31.0	29.35	31.768 E	-0.902 D	25.562	1441.1
32.0	30.15	31.857 E	-0.954 D	25.636	1441.0
33.0	31.40	31.935 E	-1.000 D	25.700	1440.9
34.0	32.25	31.985 E	-1.035 D	25.741	1440.8
35.0	33.35	32.025 E	-1.064 D	25.775	1440.8
36.0	34.30	32.061 E	-1.089 D	25.805	1440.7
37.0	35.45	32.106 E	-1.124 D	25.842	1440.6
38.0	36.20	32.162 E	-1.167 D	25.889	1440.5
39.0	37.45	32.209 E	-1.198 D	25.928	1440.4
40.0	38.40	32.257 E	-1.230 D	25.967	1440.4
41.0	39.45	32.290 E	-1.254 D	25.994	1440.3
42.0	40.30	32.323 E	-1.296 D	26.022	1440.2
43.0	41.50	32.356 E	-1.319 D	26.049	1440.1
44.0	42.40	32.377 E	-1.304 D	26.066	1440.3
45.0	43.45	32.413 E	-1.316 D	26.096	1440.3
46.0	44.45	32.452 E	-1.331 D	26.128	1440.3
47.0	45.50	32.499 E	-1.357 D	26.166	1440.2
48.0	46.50	32.543 E	-1.383 D	26.202	1440.2
49.0	47.50	32.597 E	-1.411 D	26.247	1440.2
50.0	48.50	32.641 E	-1.419 D	26.283	1440.2
51.0	49.55	32.677 E	-1.424 D	26.312	1440.2
52.0	50.65	32.714 E	-1.424 D	26.342	1440.3
53.0	51.65	32.756 E	-1.425 D	26.376	1440.4
54.0	52.65	32.798 E	-1.427 D	26.410	1440.4
55.0	53.60	32.824 E	-1.422 D	26.431	1440.5
56.0	54.45	32.845 E	-1.416 D	26.448	1440.6
57.0	55.70	32.876 E	-1.414 D	26.473	1440.7
58.0	56.45	32.905 E	-1.410 D	26.496	1440.7
59.0	57.65	32.919 E	-1.410 D	26.508	1440.8
60.0	58.65	32.934 E	-1.407 D	26.520	1440.8
61.0	59.75	32.964 E	-1.404 D	26.544	1440.9
62.0	60.70	32.994 E	-1.403 D	26.568	1441.0
63.0	61.75	33.016 E	-1.394 D	26.585	1441.1
64.0	62.80	33.045 E	-1.390 D	26.609	1441.1

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
65.0	63.70	33.072 E	-1.383 D	26.631	1441.2
66.0	64.75	33.094 E	-1.381 D	26.649	1441.3
67.0	65.70	33.114 E	-1.376 D	26.665	1441.3
68.0	66.75	33.135 E	-1.371 D	26.681	1441.4
69.0	67.70	33.152 E	-1.368 D	26.695	1441.5
70.0	68.70	33.165 E	-1.373 D	26.706	1441.5
71.0	69.80	33.182 E	-1.357 D	26.720	1441.6
72.0	70.70	33.201 E	-1.344 D	26.735	1441.7
73.0	71.85	33.234 E	-1.341 D	26.761	1441.8
74.0	72.70	33.250 E	-1.337 D	26.774	1441.8
75.0	73.85	33.275 E	-1.352 D	26.794	1441.8
76.0	74.80	33.284 E	-1.320 D	26.801	1442.0
77.0	75.85	33.307 E	-1.330 D	26.819	1442.0
78.0	77.00	33.325 E	-1.327 D	26.834	1442.1
79.0	78.00	33.338 E	-1.318 D	26.844	1442.1
80.0	78.95	33.360 E	-1.300 D	26.862	1442.3
81.0	79.85	33.386 E	-1.289 D	26.882	1442.4
82.0	81.05	33.413 E	-1.317 D	26.905	1442.3
83.0	82.05	33.430 E	-1.312 D	26.919	1442.4
84.0	83.00	33.456 E	-1.286 D	26.941	1442.5
85.0	83.90	33.473 E	-1.284 D	26.953	1442.6
86.0	85.15	33.489 E	-1.234 D	26.964	1442.9
87.0	85.95	33.503 E	-1.217 D	26.975	1443.0
88.0	87.15	33.523 E	-1.246 D	26.992	1442.9
89.0	88.10	33.542 E	-1.266 D	27.008	1442.8
90.0	89.15	33.555 E	-1.235 D	27.018	1443.0
91.0	90.15	33.572 E	-1.207 D	27.031	1443.2
92.0	91.15	33.587 E	-1.110 D	27.039	1443.7
93.0	92.10	33.614 E	-1.076 D	27.061	1443.9
94.0	93.15	33.635 E	-1.066 D	27.077	1444.0
95.0	94.25	33.656 E	-1.071 D	27.094	1444.0
96.0	95.15	33.673 E	-1.067 D	27.108	1444.1
97.0	96.30	33.683 E	-1.042 D	27.116	1444.2
98.0	97.25	33.696 E	-1.004 D	27.124	1444.4
99.0	98.20	33.709 E	-0.955 D	27.134	1444.7
100.0	99.25	33.733 E	-0.952 D	27.153	1444.7
101.0	100.20	33.746 D	-0.918 C	27.162	1444.9
102.0	101.20	33.760 D	-0.897 C	27.172	1445.1
103.0	102.25	33.774 D	-0.886 C	27.184	1445.2
104.0	103.30	33.786 D	-0.871 C	27.193	1445.3
105.0	104.20	33.800 D	-0.859 C	27.203	1445.4
106.0	105.35	33.810 D	-0.853 C	27.211	1445.4
107.0	106.25	33.822 D	-0.836 C	27.221	1445.5
108.0	107.40	33.834 D	-0.827 C	27.229	1445.6
109.0	108.25	33.844 D	-0.819 C	27.238	1445.7
110.0	109.40	33.852 D	-0.813 C	27.244	1445.7
111.0	110.45	33.862 D	-0.802 C	27.251	1445.8
112.0	111.50	33.871 D	-0.795 C	27.258	1445.9
113.0	112.50	33.880 D	-0.783 C	27.266	1446.0
114.0	113.55	33.888 D	-0.774 C	27.272	1446.0
115.0	114.50	33.898 D	-0.762 C	27.279	1446.1
116.0	115.35	33.910 D	-0.750 C	27.288	1446.2
117.0	116.55	33.922 D	-0.743 C	27.298	1446.3
118.0	117.60	33.927 D	-0.738 C	27.302	1446.3
119.0	118.60	33.935 D	-0.731 C	27.307	1446.4
120.0	119.45	33.940 D	-0.725 C	27.312	1446.4
121.0	120.60	33.951 D	-0.716 C	27.321	1446.5
122.0	121.65	33.960 D	-0.707 C	27.327	1446.6
123.0	122.65	33.968 D	-0.698 C	27.333	1446.6
124.0	123.50	33.977 D	-0.691 C	27.340	1446.7
125.0	124.80	33.983 D	-0.687 C	27.345	1446.8
126.0	125.50	33.990 D	-0.683 C	27.350	1446.8
127.0	126.75	33.994 D	-0.676 C	27.354	1446.9
128.0	127.70	34.001 D	-0.667 C	27.359	1446.9
129.0	128.70	34.011 D	-0.660 C	27.367	1447.0
130.0	129.75	34.020 D	-0.653 C	27.374	1447.0
131.0	130.80	34.028 D	-0.646 C	27.380	1447.1
132.0	131.65	34.035 D	-0.639 C	27.385	1447.2
133.0	132.90	34.044 D	-0.632 C	27.392	1447.2



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
134.0	133.60	34.050 D	-0.627 C	27.396	1447.3
135.0	134.90	34.056 D	-0.619 C	27.401	1447.3
136.0	135.70	34.064 D	-0.614 C	27.408	1447.4
137.0	136.95	34.071 D	-0.608 C	27.413	1447.4
138.0	137.70	34.077 D	-0.601 C	27.418	1447.5
139.0	138.95	34.085 D	-0.598 C	27.424	1447.5
140.0	139.75	34.089 D	-0.592 C	27.427	1447.6
141.0	141.00	34.093 D	-0.587 C	27.430	1447.6
142.0	141.75	34.100 D	-0.581 C	27.436	1447.7
143.0	143.00	34.105 D	-0.578 C	27.439	1447.7
144.0	143.80	34.111 D	-0.571 C	27.444	1447.8
145.0	145.00	34.119 D	-0.562 C	27.450	1447.9
146.0	145.95	34.126 D	-0.558 C	27.455	1447.9
147.0	146.90	34.129 D	-0.549 C	27.458	1448.0
148.0	148.10	34.140 D	-0.545 C	27.466	1448.0
149.0	148.95	34.146 D	-0.539 C	27.470	1448.1
150.0	150.20	34.150 D	-0.533 C	27.473	1448.1
151.0	151.10	34.157 D	-0.528 C	27.479	1448.2
152.0	152.10	34.167 D	-0.520 C	27.487	1448.2
153.0	153.05	34.170 D	-0.513 C	27.489	1448.3
154.0	154.20	34.178 D	-0.511 C	27.495	1448.3
155.0	155.05	34.184 D	-0.504 C	27.500	1448.4
156.0	156.15	34.189 D	-0.498 C	27.504	1448.4
157.0	157.25	34.196 D	-0.493 C	27.509	1448.5
158.0	158.15	34.202 D	-0.485 C	27.514	1448.5
159.0	159.20	34.211 D	-0.479 C	27.520	1448.6
160.0	160.10	34.217 D	-0.470 C	27.525	1448.7
161.0	161.20	34.225 D	-0.462 C	27.531	1448.7
162.0	162.20	34.230 D	-0.458 C	27.535	1448.8
163.0	163.20	34.239 D	-0.451 C	27.542	1448.8
164.0	164.30	34.250 D	-0.437 C	27.550	1448.9
165.0	165.15	34.261 D	-0.429 C	27.558	1449.0
166.0	166.30	34.272 D	-0.419 C	27.567	1449.1
167.0	167.30	34.279 D	-0.412 C	27.573	1449.1
168.0	168.25	34.283 D	-0.407 C	27.576	1449.2
169.0	169.45	34.287 D	-0.406 C	27.579	1449.2
170.0	170.30	34.292 D	-0.403 C	27.582	1449.2
171.0	171.45	34.303 D	-0.392 C	27.591	1449.3
172.0	172.45	34.309 D	-0.385 C	27.596	1449.4
173.0	173.50	34.311 D	-0.382 C	27.597	1449.4
174.0	174.30	34.314 D	-0.380 C	27.599	1449.4
175.0	175.50	34.329 D	-0.367 C	27.611	1449.5
176.0	176.50	34.331 D	-0.361 C	27.613	1449.6
177.0	177.60	34.339 D	-0.353 C	27.618	1449.7
178.0	178.40	34.358 D	-0.335 C	27.633	1449.8
179.0	179.60	34.359 D	-0.334 C	27.634	1449.8
180.0	180.40	34.358 D	-0.332 C	27.633	1449.8
181.0	181.60	34.367 D	-0.329 C	27.640	1449.9
182.0	182.45	34.370 D	-0.323 C	27.642	1449.9
183.0	183.65	34.380 D	-0.315 C	27.650	1450.0
184.0	184.60	34.383 D	-0.308 C	27.652	1450.0
185.0	185.65	34.391 D	-0.304 C	27.658	1450.1
186.0	186.70	34.406 D	-0.285 C	27.670	1450.2
187.0	187.70	34.414 D	-0.276 C	27.676	1450.3
188.0	188.75	34.418 D	-0.270 C	27.679	1450.3
189.0	189.70	34.428 D	-0.265 C	27.686	1450.4
190.0	190.75	34.433 D	-0.254 C	27.690	1450.5
191.0	191.70	34.441 D	-0.246 C	27.696	1450.5
192.0	192.75	34.446 D	-0.242 C	27.700	1450.6
193.0	193.80	34.451 D	-0.239 C	27.703	1450.6
194.0	194.75	34.455 D	-0.231 C	27.707	1450.7
195.0	195.85	34.459 D	-0.225 C	27.710	1450.7
196.0	196.80	34.466 D	-0.220 C	27.715	1450.8
197.0	197.70	34.471 D	-0.212 C	27.718	1450.8
198.0	198.95	34.483 D	-0.202 C	27.728	1450.9
199.0	199.85	34.498 D	-0.195 C	27.739	1451.0
200.0	200.90	34.505 D	-0.183 C	27.744	1451.1
201.0	201.80	34.510 D	-0.173 C	27.748	1451.1
202.0	202.95	34.522 D	-0.164 C	27.757	1451.2



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
203.0	203.95	34.529 D	-0.158 C	27.763	1451.3
204.0	204.85	34.533 D	-0.153 C	27.766	1451.3
205.0	206.00	34.539 D	-0.146 C	27.770	1451.4
206.0	206.85	34.545 D	-0.139 C	27.774	1451.4
207.0	208.10	34.548 D	-0.134 C	27.777	1451.5
208.0	209.10	34.551 D	-0.129 C	27.779	1451.5
209.0	210.05	34.553 D	-0.127 C	27.781	1451.5
210.0	211.05	34.557 D	-0.124 C	27.783	1451.6
211.0	211.95	34.560 D	-0.120 C	27.786	1451.6
212.0	213.05	34.563 D	-0.117 C	27.788	1451.6
213.0	213.95	34.566 D	-0.112 C	27.790	1451.7
214.0	215.15	34.566 D	-0.107 C	27.790	1451.7
215.0	216.25	34.572 D	-0.106 C	27.795	1451.8
216.0	217.15	34.570 D	-0.104 C	27.793	1451.8
217.0	218.30	34.574 D	-0.104 C	27.796	1451.8
218.0	219.20	34.576 D	-0.101 C	27.798	1451.8
219.0	220.25	34.579 D	-0.099 C	27.800	1451.9
220.0	221.15	34.582 D	-0.097 C	27.802	1451.9
221.0	222.15	34.582 D	-0.095 C	27.802	1451.9
222.0	223.30	34.584 D	-0.095 C	27.804	1451.9
223.0	224.10	34.585 D	-0.093 C	27.805	1452.0
224.0	225.25	34.586 D	-0.090 C	27.805	1452.0
225.0	226.30	34.588 D	-0.089 C	27.807	1452.0
226.0	227.20	34.588 D	-0.088 C	27.807	1452.0
227.0	228.40	34.590 D	-0.087 C	27.809	1452.1
228.0	229.25	34.590 D	-0.086 C	27.808	1452.1
229.0	230.35	34.590 D	-0.084 C	27.808	1452.1
230.0	231.50	34.591 D	-0.082 C	27.809	1452.1
231.0	232.45	34.594 D	-0.081 C	27.811	1452.2
232.0	233.40	34.593 D	-0.079 C	27.810	1452.2
233.0	234.40	34.594 D	-0.076 C	27.811	1452.2
234.0	235.30	34.597 D	-0.076 C	27.813	1452.2
235.0	236.60	34.599 D	-0.076 C	27.815	1452.3
236.0	237.45	34.599 D	-0.074 C	27.815	1452.3
237.0	238.45	34.600 D	-0.074 C	27.816	1452.3
238.0	239.55	34.600 D	-0.072 C	27.815	1452.3
239.0	240.60	34.601 D	-0.072 C	27.816	1452.4
240.0	241.55	34.604 D	-0.073 C	27.819	1452.4
241.0	242.50	34.604 D	-0.072 C	27.819	1452.4
242.0	243.50	34.605 D	-0.070 C	27.820	1452.4
243.0	244.65	34.605 D	-0.068 C	27.820	1452.4
244.0	245.55	34.604 D	-0.066 C	27.818	1452.5
245.0	246.65	34.605 D	-0.065 C	27.819	1452.5
246.0	247.65	34.608 D	-0.067 C	27.822	1452.5
247.0	248.70	34.607 D	-0.066 C	27.821	1452.5
248.0	249.80	34.609 D	-0.065 C	27.822	1452.5
249.0	250.70	34.610 D	-0.064 C	27.823	1452.6
250.0	251.80	34.608 D	-0.062 C	27.822	1452.6
251.0	252.75	34.612 D	-0.062 C	27.825	1452.6
252.0	253.75	34.612 D	-0.060 C	27.825	1452.6
253.0	254.75	34.612 D	-0.059 C	27.825	1452.7
254.0	255.65	34.612 D	-0.060 C	27.825	1452.7
255.0	256.80	34.615 D	-0.059 C	27.827	1452.7
256.0	257.95	34.613 D	-0.057 C	27.826	1452.7
257.0	258.90	34.613 D	-0.057 C	27.825	1452.7
258.0	259.80	34.615 D	-0.057 C	27.827	1452.8
259.0	260.85	34.616 D	-0.057 C	27.828	1452.8
260.0	261.90	34.616 D	-0.055 C	27.828	1452.8
261.0	262.85	34.617 D	-0.054 C	27.829	1452.8
262.0	263.75	34.618 D	-0.054 C	27.829	1452.8
263.0	264.80	34.618 D	-0.053 C	27.829	1452.9
264.0	265.95	34.619 D	-0.052 C	27.830	1452.9
265.0	266.90	34.618 D	-0.051 C	27.829	1452.9
266.0	267.85	34.619 D	-0.051 C	27.830	1452.9
267.0	268.95	34.619 D	-0.050 C	27.830	1452.9
268.0	270.10	34.621 D	-0.050 C	27.832	1453.0
269.0	271.00	34.619 D	-0.049 C	27.830	1453.0
270.0	272.00	34.620 D	-0.049 C	27.831	1453.0
271.0	273.05	34.621 D	-0.048 C	27.832	1453.0

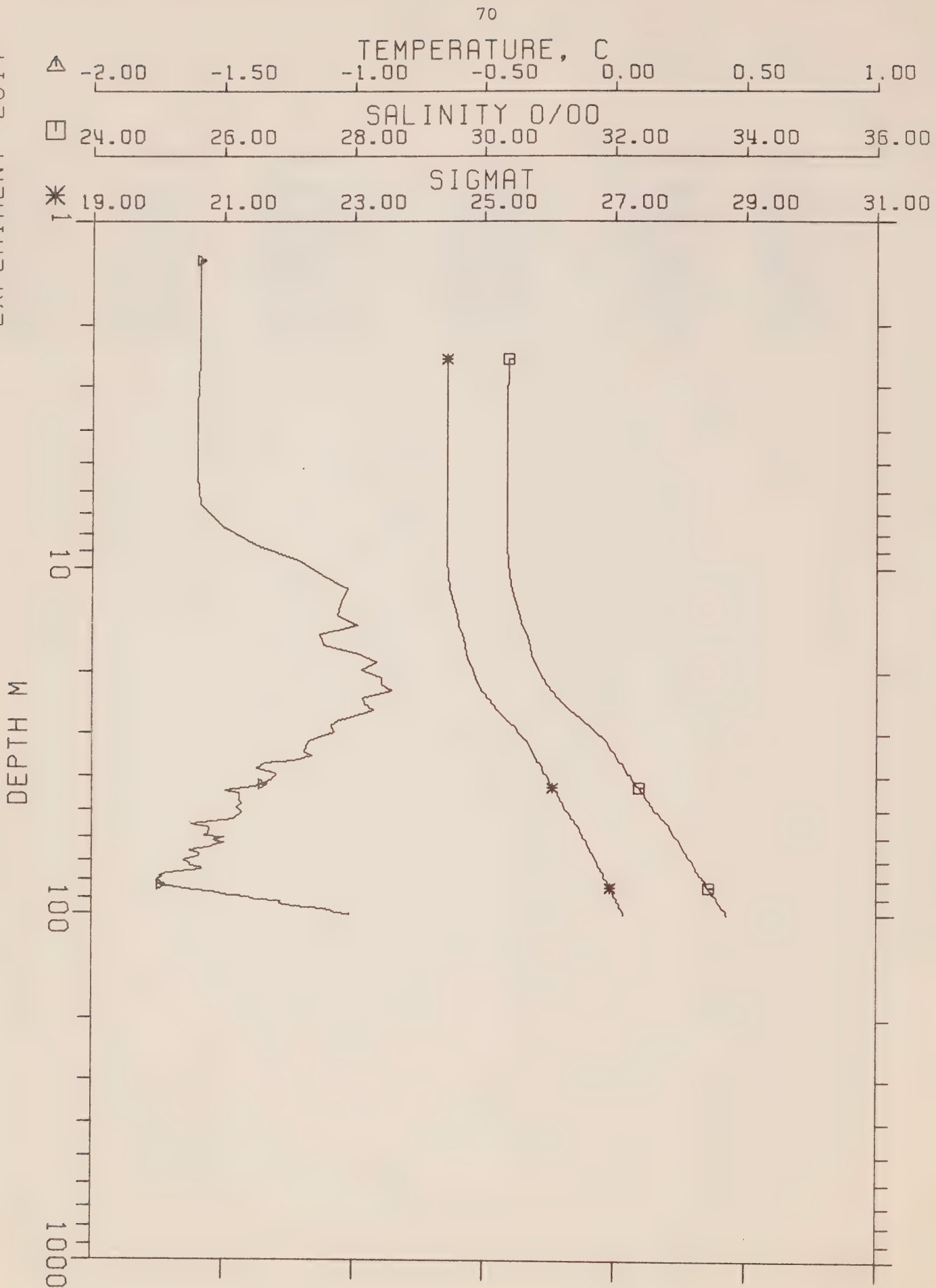
DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
272.0	274.15	34.621 D	-0.046 C	27.832	1453.0
273.0	275.10	34.624 D	-0.046 C	27.833	1453.1
274.0	276.00	34.623 D	-0.045 C	27.833	1453.1
275.0	277.10	34.626 D	-0.045 C	27.835	1453.1
276.0	278.15	34.625 D	-0.045 C	27.835	1453.1
277.0	279.10	34.626 D	-0.044 C	27.835	1453.1
278.0	280.05	34.627 D	-0.044 C	27.836	1453.2
279.0	281.25	34.628 D	-0.044 C	27.837	1453.2
280.0	282.25	34.628 D	-0.043 C	27.836	1453.2
281.0	283.20	34.626 D	-0.041 C	27.835	1453.2
282.0	284.25	34.627 D	-0.041 C	27.836	1453.2
283.0	285.30	34.628 D	-0.041 C	27.836	1453.3
284.0	286.15	34.629 D	-0.041 C	27.837	1453.3
285.0	287.20	34.628 D	-0.040 C	27.837	1453.3
286.0	288.35	34.629 D	-0.040 C	27.838	1453.3
287.0	289.40	34.630 D	-0.039 C	27.838	1453.3
288.0	290.40	34.630 D	-0.039 C	27.838	1453.4
289.0	291.40	34.629 D	-0.038 C	27.838	1453.4
290.0	292.40	34.630 D	-0.038 C	27.838	1453.4
291.0	293.35	34.631 D	-0.038 C	27.839	1453.4
292.0	294.45	34.631 D	-0.037 C	27.839	1453.4
293.0	295.55	34.631 D	-0.035 C	27.839	1453.5
294.0	296.35	34.632 D	-0.035 C	27.839	1453.5
295.0	297.35	34.631 D	-0.035 C	27.839	1453.5
296.0	298.60	34.631 D	-0.034 C	27.838	1453.5
297.0	299.45	34.630 D	-0.033 C	27.838	1453.5
298.0	300.40	34.631 D	-0.034 C	27.839	1453.5
299.0	301.65	34.632 D	-0.034 C	27.839	1453.6
300.0	302.50	34.634 D	-0.034 C	27.841	1453.6
301.0	303.55	34.634 D	-0.033 C	27.841	1453.6
302.0	304.60	34.634 D	-0.034 C	27.841	1453.6
303.0	305.60	34.633 D	-0.032 C	27.840	1453.6
304.0	306.60	34.634 D	-0.032 C	27.841	1453.7
305.0	307.60	34.636 D	-0.033 C	27.842	1453.7
306.0	308.70	34.635 D	-0.032 C	27.842	1453.7
307.0	309.70	34.634 D	-0.031 C	27.841	1453.7
308.0	310.75	34.634 D	-0.031 C	27.841	1453.7
309.0	311.55	34.635 D	-0.031 C	27.842	1453.8
310.0	312.70	34.636 D	-0.030 C	27.843	1453.8
311.0	313.80	34.635 D	-0.029 C	27.841	1453.8
312.0	314.80	34.635 D	-0.029 C	27.842	1453.8
313.0	315.80	34.637 D	-0.030 C	27.844	1453.8
314.0	316.80	34.638 D	-0.030 C	27.844	1453.8
315.0	317.80	34.638 D	-0.029 C	27.844	1453.9
316.0	318.80	34.636 D	-0.028 C	27.843	1453.9
317.0	319.70	34.637 D	-0.028 C	27.843	1453.9
318.0	320.80	34.639 D	-0.028 C	27.845	1453.9
319.0	321.90	34.636 D	-0.026 C	27.843	1453.9
320.0	322.85	34.637 D	-0.026 C	27.843	1454.0
321.0	323.90	34.637 D	-0.026 C	27.843	1454.0
322.0	325.00	34.637 D	-0.026 C	27.844	1454.0
323.0	326.00	34.638 D	-0.026 C	27.844	1454.0
324.0	327.05	34.637 D	-0.025 C	27.843	1454.0
325.0	328.05	34.636 D	-0.024 C	27.843	1454.1
326.0	329.00	34.637 D	-0.024 C	27.843	1454.1
327.0	329.95	34.638 D	-0.024 C	27.844	1454.1
328.0	330.90	34.640 D	-0.025 C	27.846	1454.1
329.0	332.10	34.640 D	-0.024 C	27.845	1454.1
330.0	333.10	34.637 D	-0.022 C	27.843	1454.1
331.0	333.95	34.639 D	-0.023 C	27.845	1454.2
332.0	335.10	34.640 D	-0.023 C	27.845	1454.2
333.0	336.20	34.639 D	-0.023 C	27.845	1454.2
334.0	337.05	34.638 D	-0.021 C	27.843	1454.2
335.0	338.05	34.640 D	-0.022 C	27.845	1454.2
336.0	339.25	34.639 D	-0.021 C	27.845	1454.3
337.0	340.10	34.638 D	-0.020 C	27.843	1454.3
338.0	341.10	34.642 D	-0.022 C	27.847	1454.3
339.0	342.30	34.640 D	-0.021 C	27.846	1454.3
340.0	343.20	34.639 D	-0.020 C	27.844	1454.3

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
341.0	344.15	34.641 D	-0.021 C	27.846	1454.3
342.0	345.40	34.640 D	-0.020 C	27.845	1454.4
343.0	346.20	34.641 D	-0.020 C	27.846	1454.4
344.0	347.35	34.640 D	-0.018 C	27.845	1454.4
345.0	348.40	34.640 D	-0.018 C	27.846	1454.4
346.0	349.35	34.640 D	-0.018 C	27.845	1454.4
347.0	350.25	34.642 D	-0.020 C	27.847	1454.4
348.0	351.40	34.640 D	-0.017 C	27.845	1454.5
349.0	352.35	34.641 D	-0.018 C	27.846	1454.5
350.0	353.40	34.641 D	-0.017 C	27.846	1454.5





EXPERIMENT 2017



CRUISE 15-76-015

D'IBERVILLE FIORD-76

EXPER NO. 2017

LAT N.80-34-00

LONG W.78-05-00

WATER DEPTH 113

DEPTH INCR.

DATE 150376

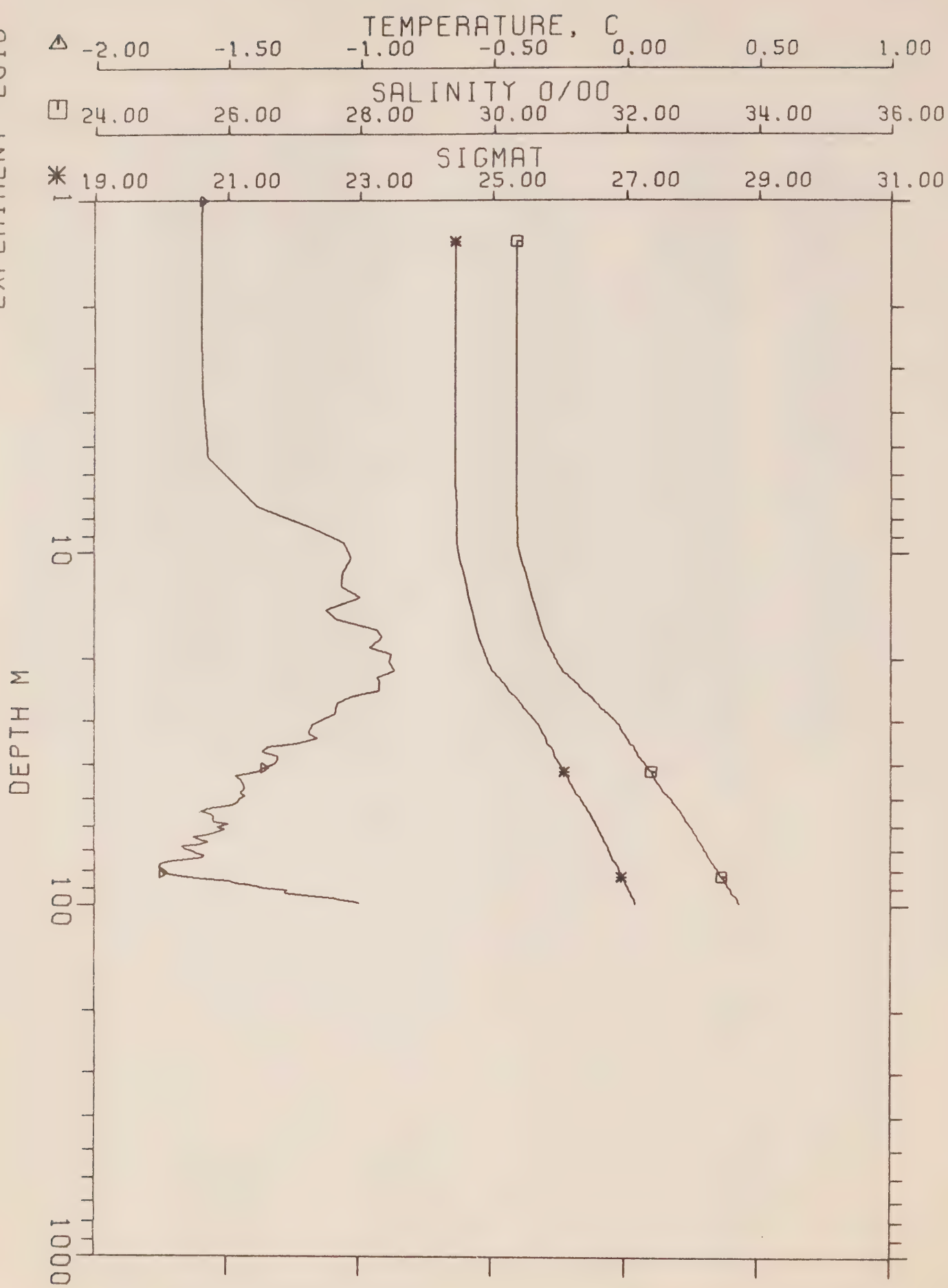
LOCAL TIME 0909

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
3.0	1.30		-1.590 D		
4.0	2.50	30.371 E	-1.592 D	24.448	1435.4
5.0	3.50	30.368 E	-1.598 D	24.446	1435.4
6.0	4.60	30.365 E	-1.598 D	24.443	1435.4
7.0	5.45	30.363 E	-1.600 D	24.442	1435.4
8.0	6.55	30.362 E	-1.588 D	24.441	1435.5
9.0	7.60	30.356 E	-1.504 D	24.434	1435.9
10.0	8.65	30.368 E	-1.372 D	24.442	1436.6
11.0	9.55	30.375 E	-1.212 D	24.444	1437.4
12.0	10.45	30.393 E	-1.119 D	24.457	1437.8
13.0	11.55	30.436 E	-1.021 D	24.489	1438.4
14.0	12.55	30.491 E	-1.045 D	24.535	1438.4
15.0	13.65	30.563 E	-1.061 D	24.593	1438.4
16.0	14.65	30.601 E	-0.980 D	24.621	1438.8
17.0	15.60	30.670 E	-1.132 D	24.681	1438.2
18.0	16.70	30.719 E	-1.115 D	24.721	1438.4
19.0	17.70	30.744 E	-0.979 D	24.737	1439.1
20.0	18.75	30.790 E	-0.912 D	24.773	1439.5
21.0	19.70	30.861 E	-0.971 D	24.832	1439.3
22.0	20.75	30.912 E	-0.891 D	24.871	1439.8
23.0	21.70	30.979 E	-0.889 D	24.924	1439.0
24.0	22.55	31.059 E	-0.851 D	24.988	1440.2
25.0	23.70	31.160 E	-0.967 D	25.073	1439.8
26.0	24.60	31.246 E	-0.953 D	25.143	1440.0
27.0	25.75	31.345 E	-0.918 D	25.222	1440.4
28.0	26.75	31.471 E	-0.999 D	25.325	1440.2
29.0	27.80	31.560 E	-1.065 D	25.399	1440.0
30.0	28.60	31.650 E	-1.085 D	25.472	1440.0
31.0	29.70	31.744 E	-1.070 D	25.548	1440.3
32.0	30.80	31.836 E	-1.130 D	25.624	1440.1
33.0	31.65	31.903 E	-1.171 D	25.679	1440.0
34.0	32.90	31.946 E	-1.180 D	25.714	1440.1
35.0	33.80	31.998 E	-1.187 D	25.756	1440.1
36.0	34.70	32.039 E	-1.156 D	25.789	1440.4
37.0	35.90	32.082 E	-1.227 D	25.825	1440.1
38.0	36.70	32.142 E	-1.340 D	25.877	1439.7
39.0	37.85	32.178 E	-1.372 D	25.907	1439.6
40.0	38.90	32.207 E	-1.305 D	25.929	1440.0
41.0	39.75	32.259 E	-1.295 D	25.970	1440.1
42.0	40.90	32.301 E	-1.316 D	26.005	1440.1
43.0	41.95	32.338 E	-1.352 D	26.036	1440.0
44.0	42.85	32.372 E	-1.380 D	26.064	1439.9
45.0	43.90	32.427 E	-1.491 D	26.111	1439.5
46.0	44.85	32.463 E	-1.434 D	26.139	1439.8
47.0	46.00	32.487 E	-1.433 D	26.158	1439.9
48.0	46.95	32.531 E	-1.434 D	26.194	1439.9
49.0	47.80	32.558 E	-1.429 D	26.216	1440.0
50.0	49.00	32.594 E	-1.443 D	26.246	1440.0
51.0	49.95	32.629 E	-1.435 D	26.274	1440.1
52.0	51.05	32.676 E	-1.432 D	26.311	1440.2
53.0	52.00	32.718 E	-1.450 D	26.346	1440.2
54.0	52.90	32.753 E	-1.461 D	26.375	1440.2
55.0	54.05	32.793 E	-1.540 D	26.409	1439.9
56.0	54.90	32.830 E	-1.620 D	26.441	1439.6
57.0	56.15	32.854 E	-1.557 D	26.458	1440.0
58.0	57.05	32.886 E	-1.552 D	26.484	1440.0
59.0	58.15	32.908 E	-1.555 D	26.502	1440.1
60.0	59.15	32.936 E	-1.570 D	26.525	1440.1
61.0	60.15	32.956 E	-1.489 D	26.539	1440.5
62.0	61.15	32.995 E	-1.535 D	26.573	1440.3
63.0	62.10	33.012 E	-1.493 D	26.585	1440.6
64.0	63.25	33.035 E	-1.537 D	26.605	1440.4



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
65.0	64.15	33.058 E	-1.556 D	26.624	1440.4
66.0	65.25	33.088 E	-1.624 D	26.650	1440.1
67.0	66.15	33.104 E	-1.616 D	26.663	1440.2
68.0	67.10	33.126 E	-1.585 D	26.679	1440.4
69.0	68.20	33.149 E	-1.592 D	26.699	1440.4
70.0	69.10	33.175 E	-1.636 D	26.721	1440.3
71.0	70.20	33.191 E	-1.652 D	26.734	1440.2
72.0	71.25	33.210 E	-1.626 D	26.749	1440.4
73.0	72.35	33.232 E	-1.626 D	26.766	1440.4
74.0	73.15	33.246 E	-1.583 D	26.777	1440.7
75.0	74.25	33.269 E	-1.580 D	26.795	1440.7
76.0	75.20	33.288 E	-1.630 D	26.812	1440.5
77.0	76.35	33.309 E	-1.712 D	26.831	1440.2
78.0	77.30	33.331 E	-1.739 D	26.849	1440.1
79.0	78.30	33.349 E	-1.729 D	26.864	1440.2
80.0	79.25	33.370 E	-1.743 D	26.881	1440.2
81.0	80.40	33.388 E	-1.752 D	26.896	1440.2
82.0	81.30	33.403 E	-1.752 D	26.908	1440.2
83.0	82.30	33.421 E	-1.739 D	26.922	1440.3
84.0	83.45	33.441 E	-1.702 D	26.938	1440.6
85.0	84.40	33.469 E	-1.642 D	26.959	1440.9
86.0	85.35	33.488 E	-1.601 D	26.973	1441.1
87.0	86.50	33.508 E	-1.512 D	26.987	1441.6
88.0	87.30	33.519 E	-1.509 D	26.996	1441.6
89.0	88.55	33.535 E	-1.462 D	27.008	1441.9
90.0	89.35	33.550 E	-1.406 D	27.019	1442.2
91.0	90.55	33.573 E	-1.374 D	27.036	1442.4
92.0	91.35	33.582 E	-1.280 D	27.041	1442.9
93.0	92.60	33.609 E	-1.282 D	27.063	1442.9
94.0	93.40	33.619 E	-1.286 D	27.071	1442.9
95.0	94.60	33.640 E	-1.232 D	27.087	1443.2
96.0	95.40	33.659 E	-1.169 D	27.100	1443.6
97.0	96.70	33.681 E	-1.115 D	27.116	1443.9
98.0	97.45	33.695 E	-1.092 D	27.126	1444.0
99.0	98.55	33.706 E	-1.067 D	27.134	1444.2
100.0	99.65	33.719 E	-1.015 D	27.143	1444.4







CRUISE 15-76-015

C'IBERVILLE FIORD-76

EXPER NO. 2018

LAT N.80-34-00

LONG W.78-05-00

WATER DEPTH 113

DEPTH INCR.

DATE 150376

LOCAL TIME 0920

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
3.0	0.25		-1.592 D		
4.0	1.30	30.361 E	-1.598 D	24.439	1435.4
5.0	2.15	30.358 E	-1.599 D	24.437	1435.4
6.0	3.35	30.355 E	-1.597 D	24.435	1435.4
7.0	4.20	30.358 E	-1.587 D	24.437	1435.5
8.0	5.35	30.359 E	-1.574 D	24.438	1435.5
9.0	6.35	30.355 E	-1.475 D	24.433	1436.0
10.0	7.35	30.375 E	-1.391 D	24.447	1436.5
11.0	8.40	30.379 E	-1.191 D	24.447	1437.4
12.0	9.30	30.380 E	-1.059 D	24.445	1438.1
13.0	10.40	30.441 E	-1.031 D	24.493	1438.3
14.0	11.30	30.511 E	-1.060 D	24.551	1438.3
15.0	12.45	30.569 E	-1.068 D	24.598	1438.4
16.0	13.35	30.607 E	-0.994 D	24.627	1438.8
17.0	14.45	30.667 E	-1.128 D	24.679	1438.2
18.0	15.35	30.705 E	-1.089 D	24.708	1438.5
19.0	16.50	30.757 E	-0.936 D	24.747	1439.3
20.0	17.35	30.801 E	-0.912 D	24.782	1439.5
21.0	18.50	30.867 E	-0.959 D	24.836	1439.4
22.0	19.35	30.925 E	-0.875 D	24.881	1439.9
23.0	20.45	30.989 E	-0.884 D	24.932	1439.9
24.0	21.50	31.071 E	-0.867 D	24.999	1440.1
25.0	22.50	31.176 E	-0.930 D	25.085	1440.0
26.0	23.35	31.278 E	-0.921 D	25.167	1440.2
27.0	24.50	31.373 E	-0.923 D	25.244	1440.4
28.0	25.45	31.486 E	-1.027 D	25.338	1440.0
29.0	26.45	31.575 E	-1.076 D	25.411	1440.0
30.0	27.50	31.655 E	-1.082 D	25.476	1440.1
31.0	28.55	31.751 E	-1.087 D	25.554	1440.2
32.0	29.65	31.844 E	-1.137 D	25.630	1440.1
33.0	30.60	31.906 E	-1.169 D	25.682	1440.0
34.0	31.65	31.954 E	-1.182 D	25.721	1440.1
35.0	32.60	32.000 E	-1.188 D	25.758	1440.1
36.0	33.50	32.040 E	-1.156 D	25.789	1440.3
37.0	34.60	32.081 E	-1.230 D	25.825	1440.1
38.0	35.45	32.141 E	-1.341 D	25.876	1439.6
39.0	36.70	32.184 E	-1.366 D	25.912	1439.6
40.0	37.65	32.214 E	-1.305 D	25.934	1440.0
41.0	38.70	32.269 E	-1.304 D	25.979	1440.1
42.0	39.50	32.309 E	-1.317 D	26.012	1440.1
43.0	40.65	32.347 E	-1.358 D	26.043	1439.9
44.0	41.55	32.386 E	-1.373 D	26.075	1439.9
45.0	42.80	32.433 E	-1.468 D	26.116	1439.6
46.0	43.70	32.463 E	-1.448 D	26.139	1439.7
47.0	44.70	32.493 E	-1.440 D	26.164	1439.8
48.0	45.70	32.533 E	-1.434 D	26.196	1439.9
49.0	46.70	32.562 E	-1.430 D	26.219	1440.0
50.0	47.80	32.605 E	-1.448 D	26.254	1440.0
51.0	48.65	32.655 E	-1.428 D	26.294	1440.2
52.0	49.75	32.697 E	-1.447 D	26.329	1440.2
53.0	50.85	32.727 E	-1.453 D	26.353	1440.2
54.0	51.80	32.762 E	-1.474 D	26.382	1440.2
55.0	52.75	32.803 E	-1.556 D	26.417	1439.8
56.0	53.90	32.835 E	-1.597 D	26.444	1439.7
57.0	54.85	32.867 E	-1.563 D	26.469	1439.9
58.0	55.90	32.893 E	-1.551 D	26.490	1440.0
59.0	56.85	32.915 E	-1.551 D	26.508	1440.1
60.0	57.90	32.937 E	-1.549 D	26.526	1440.1
61.0	58.75	32.965 E	-1.491 D	26.547	1440.5
62.0	60.00	32.999 E	-1.534 D	26.576	1440.3
63.0	60.80	33.023 E	-1.505 D	26.594	1440.5
64.0	61.95	33.044 E	-1.541 D	26.613	1440.4

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
65.0	62.85	33.067 E	-1.563 D	26.631	1440.3
66.0	63.95	33.090 E	-1.628 D	26.652	1440.1
67.0	65.00	33.113 E	-1.603 D	26.669	1440.3
68.0	65.95	33.133 E	-1.567 D	26.685	1440.5
69.0	67.05	33.159 E	-1.598 D	26.707	1440.4
70.0	67.95	33.184 E	-1.669 D	26.729	1440.1
71.0	69.10	33.194 E	-1.660 D	26.737	1440.2
72.0	70.00	33.217 E	-1.630 D	26.754	1440.4
73.0	71.15	33.239 E	-1.614 D	26.772	1440.5
74.0	72.00	33.251 E	-1.583 D	26.781	1440.7
75.0	73.10	33.272 E	-1.592 D	26.798	1440.7
76.0	74.10	33.291 E	-1.649 D	26.815	1440.4
77.0	75.10	33.314 E	-1.715 D	26.835	1440.2
78.0	76.10	33.340 E	-1.746 D	26.856	1440.1
79.0	77.20	33.362 E	-1.751 D	26.875	1440.1
80.0	78.00	33.381 E	-1.757 D	26.890	1440.1
81.0	79.15	33.398 E	-1.755 D	26.905	1440.2
82.0	80.15	33.409 E	-1.746 D	26.913	1440.2
83.0	81.10	33.425 E	-1.742 D	26.925	1440.3
84.0	82.30	33.447 E	-1.683 D	26.942	1440.6
85.0	83.25	33.474 E	-1.642 D	26.963	1440.9
86.0	84.25	33.491 E	-1.570 D	26.975	1441.3
87.0	85.10	33.515 E	-1.494 D	26.993	1441.7
88.0	86.30	33.529 E	-1.469 D	27.004	1441.8
89.0	87.30	33.544 E	-1.422 D	27.014	1442.1
90.0	88.30	33.561 E	-1.383 D	27.027	1442.3
91.0	89.25	33.580 E	-1.364 D	27.042	1442.4
92.0	90.15	33.597 E	-1.270 D	27.053	1442.9
93.0	91.35	33.614 E	-1.278 D	27.067	1442.9
94.0	92.25	33.623 E	-1.280 D	27.074	1442.9
95.0	93.30	33.650 E	-1.206 D	27.094	1443.3
96.0	94.40	33.665 E	-1.156 D	27.105	1443.6
97.0	95.25	33.687 E	-1.102 D	27.120	1443.9
98.0	96.50	33.702 E	-1.068 D	27.132	1444.1
99.0	97.45	33.714 E	-1.015 D	27.139	1444.4
100.0	98.50	33.731 E	-0.997 D	27.153	1444.5





EXPERIMENT 2019

78

TEMPERATURE, C

-2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00

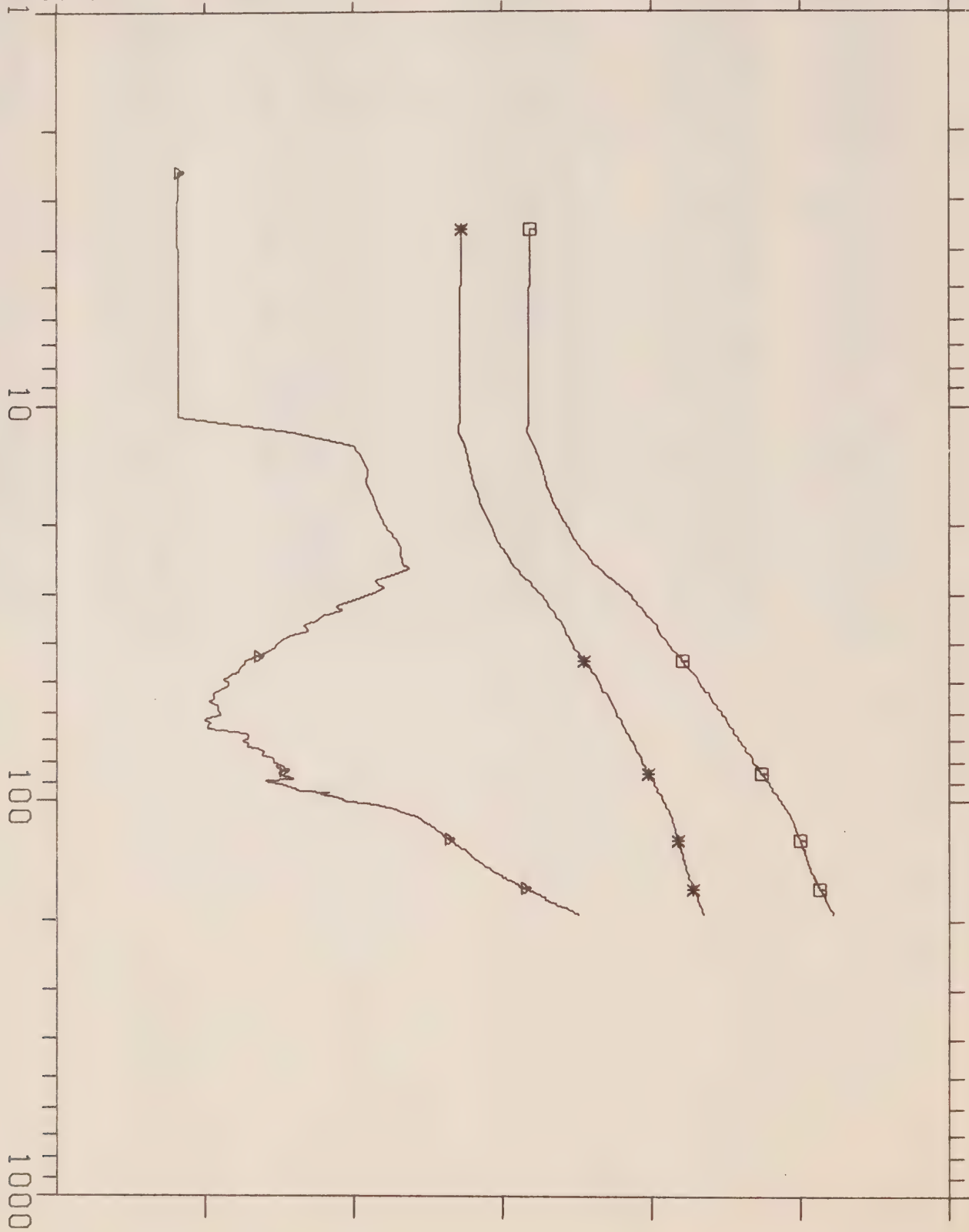
SALINITY 0/00

24.00 26.00 28.00 30.00 32.00 34.00 36.00

SIGMAT

\* 19.00 21.00 23.00 25.00 27.00 29.00 31.00

DEPTH M



CRUISE 15-76-015

D'IBERVILLE FIORD-76

EXPER NO. 2019

LAT N.80-35-00

LONG W.78-19-00

WATER DEPTH 210

DEPTH INCR.

DATE 150376

LOCAL TIME 1600

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
3.0	2.55		-1.592 D		
4.0	3.55	30.385 E	-1.593 D	24.459	1435.5
5.0	4.45	30.376 E	-1.592 D	24.452	1435.5
6.0	5.55	30.370 E	-1.592 D	24.447	1435.5
7.0	6.45	30.367 E	-1.590 D	24.445	1435.5
8.0	7.65	30.365 E	-1.591 D	24.443	1435.5
9.0	8.55	30.363 E	-1.591 D	24.441	1435.5
10.0	9.50	30.364 E	-1.591 D	24.442	1435.5
11.0	10.65	30.363 E	-1.590 D	24.442	1435.6
12.0	11.60	30.336 E	-1.204 D	24.413	1437.4
13.0	12.55	30.441 E	-0.998 D	24.493	1438.5
14.0	13.50	30.492 E	-0.969 D	24.533	1438.7
15.0	14.60	30.551 E	-0.950 D	24.581	1438.9
16.0	15.70	30.606 E	-0.953 D	24.625	1439.0
17.0	16.65	30.665 E	-0.934 D	24.673	1439.2
18.0	17.65	30.710 E	-0.927 D	24.708	1439.3
19.0	18.55	30.775 E	-0.917 D	24.761	1439.5
20.0	19.55	30.846 E	-0.901 D	24.818	1439.6
21.0	20.60	30.912 E	-0.880 D	24.871	1439.9
22.0	21.55	30.972 E	-0.856 D	24.918	1440.1
23.0	22.70	31.068 E	-0.842 D	24.996	1440.2
24.0	23.55	31.149 E	-0.840 D	25.061	1440.4
25.0	24.75	31.224 E	-0.834 D	25.122	1440.6
26.0	25.75	31.315 E	-0.811 D	25.194	1440.8
27.0	26.85	31.418 E	-0.881 D	25.279	1440.7
28.0	27.65	31.504 E	-0.926 D	25.350	1440.6
29.0	28.75	31.613 E	-0.894 D	25.438	1440.9
30.0	29.75	31.721 E	-0.942 D	25.526	1440.8
31.0	30.70	31.785 E	-0.994 D	25.579	1440.7
32.0	31.80	31.839 E	-1.054 D	25.624	1440.5
33.0	32.75	31.908 E	-1.037 D	25.680	1440.7
34.0	33.80	31.966 E	-1.103 D	25.728	1440.5
35.0	34.85	32.023 E	-1.121 D	25.775	1440.5
36.0	35.75	32.071 E	-1.163 D	25.814	1440.4
37.0	36.85	32.091 E	-1.149 D	25.831	1440.5
38.0	37.85	32.148 E	-1.205 D	25.878	1440.3
39.0	38.75	32.196 E	-1.238 D	25.918	1440.3
40.0	39.90	32.234 E	-1.255 D	25.949	1440.3
41.0	40.90	32.279 E	-1.265 D	25.986	1440.3
42.0	41.85	32.326 E	-1.289 D	26.025	1440.3
43.0	42.90	32.377 E	-1.318 D	26.067	1440.2
44.0	43.90	32.420 E	-1.358 D	26.102	1440.1
45.0	45.00	32.468 E	-1.372 D	26.142	1440.1
46.0	45.85	32.510 E	-1.381 D	26.176	1440.1
47.0	46.90	32.563 E	-1.387 D	26.219	1440.2
48.0	47.95	32.604 E	-1.416 D	26.253	1440.1
49.0	49.00	32.633 E	-1.434 D	26.277	1440.1
50.0	50.00	32.658 E	-1.421 D	26.297	1440.2
51.0	50.90	32.683 E	-1.421 D	26.317	1440.3
52.0	52.00	32.718 E	-1.443 D	26.346	1440.2
53.0	53.10	32.780 E	-1.468 D	26.397	1440.2
54.0	54.10	32.805 E	-1.471 D	26.417	1440.3
55.0	55.05	32.826 E	-1.470 D	26.433	1440.3
56.0	56.00	32.850 E	-1.486 D	26.454	1440.3
57.0	57.05	32.871 E	-1.460 D	26.470	1440.5
58.0	58.05	32.898 E	-1.453 D	26.492	1440.5
59.0	59.00	32.935 E	-1.456 D	26.522	1440.6
60.0	60.20	32.963 E	-1.446 D	26.544	1440.7
61.0	61.10	32.994 E	-1.469 D	26.570	1440.7
62.0	62.25	33.022 E	-1.501 D	26.594	1440.6
63.0	63.20	33.038 E	-1.481 D	26.606	1440.7
64.0	64.20	33.066 E	-1.491 D	26.629	1440.7

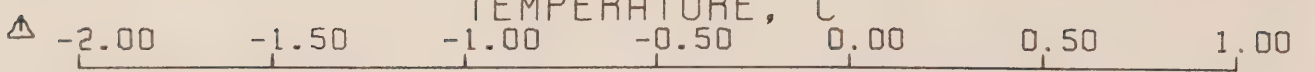
DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
65.0	65.25	33.092 E	-1.492 D	26.650	1440.8
66.0	66.20	33.105 E	-1.400 D	26.658	1441.2
67.0	67.25	33.128 E	-1.360 D	26.676	1441.5
68.0	68.25	33.157 E	-1.352 D	26.699	1441.6
69.0	69.30	33.181 E	-1.354 D	26.718	1441.6
70.0	70.25	33.204 E	-1.371 D	26.737	1441.6
71.0	71.35	33.225 E	-1.348 D	26.754	1441.7
72.0	72.25	33.250 E	-1.353 D	26.774	1441.7
73.0	73.30	33.264 E	-1.326 D	26.785	1441.9
74.0	74.30	33.285 E	-1.302 D	26.801	1442.1
75.0	75.15	33.307 E	-1.298 D	26.819	1442.1
76.0	76.30	33.333 E	-1.303 D	26.840	1442.2
77.0	77.15	33.350 E	-1.277 D	26.853	1442.3
78.0	78.40	33.368 E	-1.268 D	26.867	1442.4
79.0	79.40	33.386 E	-1.265 D	26.882	1442.5
80.0	80.45	33.403 E	-1.251 D	26.895	1442.6
81.0	81.25	33.422 E	-1.258 D	26.911	1442.6
82.0	82.35	33.442 E	-1.243 D	26.926	1442.7
83.0	83.40	33.460 E	-1.237 D	26.941	1442.8
84.0	84.55	33.478 E	-1.249 D	26.956	1442.8
85.0	85.35	33.499 E	-1.244 D	26.972	1442.8
86.0	86.40	33.510 E	-1.214 D	26.981	1443.0
87.0	87.50	33.533 E	-1.202 D	26.999	1443.1
88.0	88.45	33.558 E	-1.294 D	27.022	1442.7
89.0	89.45	33.571 E	-1.273 D	27.032	1442.9
90.0	90.60	33.592 E	-1.224 D	27.048	1443.1
91.0	91.45	33.612 E	-1.216 D	27.064	1443.2
92.0	92.50	33.628 E	-1.200 D	27.075	1443.3
93.0	93.60	33.640 E	-1.176 D	27.085	1443.5
94.0	94.50	33.655 E	-1.082 D	27.093	1444.0
95.0	95.60	33.680 E	-1.108 D	27.115	1443.9
96.0	96.50	33.701 E	-1.079 D	27.131	1444.1
97.0	97.65	33.718 E	-1.037 D	27.143	1444.3
98.0	98.55	33.732 E	-1.034 D	27.154	1444.4
99.0	99.65	33.745 E	-1.015 D	27.164	1444.5
100.0	100.60	33.757 D	-0.961 C	27.172	1444.8
101.0	101.65	33.773 D	-0.918 C	27.183	1445.0
102.0	102.70	33.788 D	-0.905 C	27.195	1445.1
103.0	103.65	33.806 D	-0.880 C	27.209	1445.3
104.0	104.55	33.820 D	-0.856 C	27.219	1445.4
105.0	105.70	33.837 D	-0.834 C	27.232	1445.6
106.0	106.55	33.851 D	-0.819 C	27.243	1445.7
107.0	107.75	33.867 D	-0.800 C	27.256	1445.8
108.0	108.70	33.880 D	-0.785 C	27.266	1445.9
109.0	109.85	33.890 D	-0.777 C	27.273	1446.0
110.0	110.80	33.897 D	-0.771 C	27.279	1446.0
111.0	111.80	33.901 D	-0.764 C	27.282	1446.1
112.0	112.90	33.911 D	-0.754 C	27.290	1446.1
113.0	113.80	33.918 D	-0.747 C	27.294	1446.2
114.0	114.95	33.928 D	-0.739 C	27.303	1446.3
115.0	115.80	33.933 D	-0.731 C	27.306	1446.3
116.0	116.90	33.940 D	-0.725 C	27.312	1446.4
117.0	117.80	33.947 D	-0.718 C	27.317	1446.4
118.0	118.85	33.955 D	-0.712 C	27.323	1446.5
119.0	119.90	33.961 D	-0.707 C	27.328	1446.5
120.0	120.75	33.966 D	-0.702 C	27.332	1446.6
121.0	121.95	33.976 D	-0.695 C	27.340	1446.7
122.0	122.75	33.985 D	-0.685 C	27.346	1446.7
123.0	123.90	33.991 D	-0.679 C	27.351	1446.8
124.0	124.95	33.998 D	-0.672 C	27.357	1446.8
125.0	126.05	34.007 D	-0.666 C	27.363	1446.9
126.0	126.95	34.016 D	-0.659 C	27.370	1447.0
127.0	127.85	34.022 D	-0.652 C	27.375	1447.0
128.0	128.95	34.028 D	-0.644 C	27.380	1447.1
129.0	130.00	34.037 D	-0.638 C	27.386	1447.1
130.0	131.10	34.043 D	-0.631 C	27.391	1447.2
131.0	132.00	34.050 D	-0.624 C	27.397	1447.3
132.0	133.00	34.057 D	-0.618 C	27.402	1447.3
133.0	133.90	34.063 D	-0.613 C	27.406	1447.4



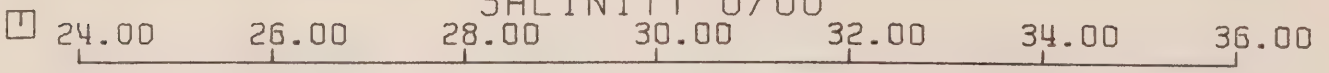
DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
134.0	135.15	34.070 D	-0.608 C	27.412	1447.4
135.0	136.05	34.073 D	-0.603 C	27.415	1447.5
136.0	137.10	34.080 D	-0.599 C	27.420	1447.5
137.0	138.15	34.084 D	-0.595 C	27.422	1447.5
138.0	139.05	34.091 D	-0.589 C	27.428	1447.6
139.0	140.05	34.098 D	-0.584 C	27.433	1447.6
140.0	141.10	34.100 D	-0.578 C	27.435	1447.7
141.0	142.05	34.109 D	-0.572 C	27.442	1447.7
142.0	143.15	34.114 D	-0.567 C	27.446	1447.8
143.0	144.30	34.122 D	-0.560 C	27.452	1447.9
144.0	145.25	34.129 D	-0.552 C	27.458	1447.9
145.0	146.25	34.135 D	-0.546 C	27.462	1448.0
146.0	147.10	34.140 D	-0.541 C	27.466	1448.0
147.0	148.15	34.144 D	-0.536 C	27.469	1448.1
148.0	149.35	34.150 D	-0.530 C	27.473	1448.1
149.0	150.30	34.162 D	-0.523 C	27.483	1448.2
150.0	151.30	34.166 D	-0.513 C	27.485	1448.2
151.0	152.35	34.177 D	-0.506 C	27.495	1448.3
152.0	153.15	34.180 D	-0.501 C	27.496	1448.3
153.0	154.40	34.187 D	-0.500 C	27.502	1448.4
154.0	155.35	34.193 D	-0.492 C	27.507	1448.5
155.0	156.40	34.196 D	-0.486 C	27.509	1448.5
156.0	157.40	34.206 D	-0.475 C	27.516	1448.6
157.0	158.25	34.218 D	-0.468 C	27.526	1448.6
158.0	159.30	34.226 D	-0.462 C	27.532	1448.7
159.0	160.50	34.233 D	-0.452 C	27.537	1448.8
160.0	161.50	34.242 D	-0.444 C	27.544	1448.8
161.0	162.45	34.248 D	-0.438 C	27.549	1448.9
162.0	163.30	34.255 D	-0.433 C	27.554	1448.9
163.0	164.45	34.265 D	-0.426 C	27.562	1449.0
164.0	165.50	34.268 D	-0.417 C	27.564	1449.1
165.0	166.45	34.278 D	-0.409 C	27.571	1449.1
166.0	167.55	34.287 D	-0.401 C	27.578	1449.2
167.0	168.60	34.297 D	-0.393 C	27.586	1449.3
168.0	169.60	34.304 D	-0.382 C	27.592	1449.3
169.0	170.55	34.313 D	-0.376 C	27.598	1449.4
170.0	171.60	34.321 D	-0.368 C	27.604	1449.5
171.0	172.65	34.330 D	-0.363 C	27.612	1449.5
172.0	173.60	34.333 D	-0.356 C	27.614	1449.6
173.0	174.65	34.337 D	-0.355 C	27.617	1449.6
174.0	175.65	34.340 D	-0.354 C	27.619	1449.6
175.0	176.60	34.340 D	-0.350 C	27.619	1449.7
176.0	177.50	34.352 D	-0.339 C	27.628	1449.7
177.0	178.65	34.362 D	-0.328 C	27.636	1449.8
178.0	179.75	34.367 D	-0.322 C	27.640	1449.9
179.0	180.65	34.372 D	-0.320 C	27.643	1449.9
180.0	181.80	34.378 D	-0.313 C	27.648	1450.0
181.0	182.70	34.387 D	-0.305 C	27.655	1450.0
182.0	183.75	34.392 D	-0.296 C	27.658	1450.1
183.0	184.75	34.400 D	-0.287 C	27.664	1450.2
184.0	185.60	34.408 D	-0.280 C	27.671	1450.2
185.0	186.85	34.416 D	-0.273 C	27.676	1450.3
186.0	187.90	34.421 D	-0.266 C	27.681	1450.3
187.0	188.80	34.430 D	-0.258 C	27.688	1450.4
188.0	189.85	34.431 D	-0.254 C	27.688	1450.4
189.0	190.90	34.438 D	-0.248 C	27.693	1450.5
190.0	191.70	34.441 D	-0.245 C	27.696	1450.5

EXPERIMENT 2020

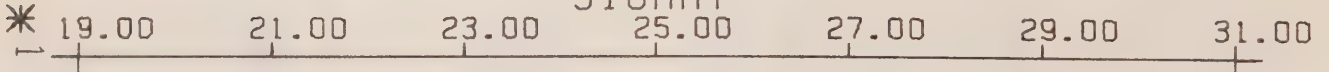
TEMPERATURE, C



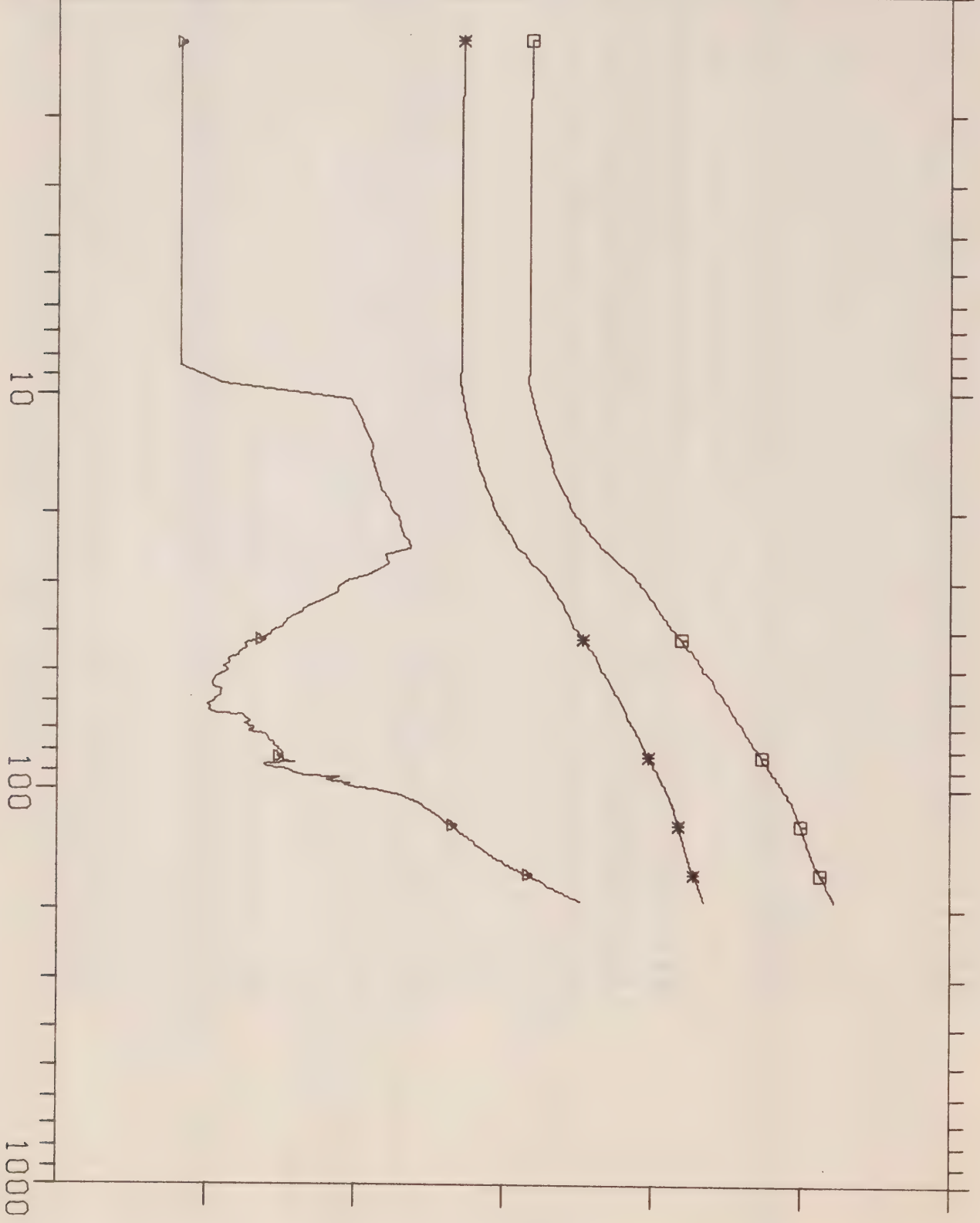
SALINITY 0/00



SIGMAT



DEPTH M



CRUISE 15-76-015

D'IBERVILLE FIORD-76

EXPER NO. 2020

LAT N.80-35-00

LONG W.78-19-00

WATER DEPTH 210

DEPTH INCR.

DATE 150376

LOCAL TIME 1614

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
3.0	1.30	30.375 E	-1.589 D	24.451	1435.4
4.0	2.50	30.367 E	-1.588 D	24.445	1435.4
5.0	3.30	30.364 E	-1.588 D	24.442	1435.5
6.0	4.55	30.363 E	-1.588 D	24.441	1435.5
7.0	5.30	30.361 E	-1.588 D	24.440	1435.5
8.0	6.50	30.362 E	-1.589 D	24.440	1435.5
9.0	7.35	30.361 E	-1.589 D	24.440	1435.5
10.0	8.50	30.360 E	-1.588 D	24.439	1435.5
11.0	9.40	30.349 E	-1.451 D	24.428	1436.2
12.0	10.40	30.400 E	-1.015 D	24.460	1438.3
13.0	11.55	30.458 E	-0.980 D	24.506	1438.6
14.0	12.40	30.519 E	-0.965 D	24.555	1438.8
15.0	13.60	30.577 E	-0.942 D	24.602	1439.0
16.0	14.40	30.630 E	-0.945 D	24.645	1439.1
17.0	15.65	30.686 E	-0.930 D	24.690	1439.2
18.0	16.55	30.738 E	-0.922 D	24.731	1439.3
19.0	17.55	30.807 E	-0.911 D	24.787	1439.5
20.0	18.55	30.872 E	-0.886 D	24.838	1439.7
21.0	19.60	30.924 E	-0.874 D	24.880	1439.9
22.0	20.50	30.993 E	-0.850 D	24.935	1440.1
23.0	21.55	31.092 E	-0.845 D	25.015	1440.3
24.0	22.70	31.187 E	-0.834 D	25.091	1440.5
25.0	23.60	31.255 E	-0.814 D	25.146	1440.7
26.0	24.60	31.334 E	-0.810 D	25.209	1440.8
27.0	25.50	31.445 E	-0.897 D	25.302	1440.6
28.0	26.75	31.554 E	-0.886 D	25.389	1440.8
29.0	27.70	31.669 E	-0.916 D	25.483	1440.9
30.0	28.70	31.753 E	-0.962 D	25.552	1440.8
31.0	29.65	31.820 E	-1.032 D	25.608	1440.6
32.0	30.75	31.881 E	-1.054 D	25.658	1440.6
33.0	31.70	31.933 E	-1.055 D	25.701	1440.6
34.0	32.75	31.984 E	-1.094 D	25.743	1440.5
35.0	33.55	32.044 E	-1.123 D	25.792	1440.5
36.0	34.75	32.081 E	-1.168 D	25.823	1440.4
37.0	35.65	32.118 E	-1.180 D	25.853	1440.4
38.0	36.85	32.175 E	-1.226 D	25.901	1440.3
39.0	37.75	32.210 E	-1.236 D	25.929	1440.3
40.0	38.90	32.254 E	-1.245 D	25.965	1440.3
41.0	39.70	32.297 E	-1.277 D	26.001	1440.2
42.0	40.75	32.345 E	-1.285 D	26.039	1440.3
43.0	41.85	32.394 E	-1.321 D	26.081	1440.2
44.0	42.90	32.437 E	-1.369 D	26.116	1440.0
45.0	43.85	32.486 E	-1.358 D	26.156	1440.2
46.0	44.70	32.531 E	-1.386 D	26.193	1440.1
47.0	45.90	32.582 E	-1.389 D	26.234	1440.2
48.0	46.80	32.620 E	-1.427 D	26.266	1440.1
49.0	48.00	32.642 E	-1.418 D	26.283	1440.2
50.0	48.85	32.671 E	-1.440 D	26.307	1440.1
51.0	49.95	32.689 E	-1.425 D	26.322	1440.3
52.0	50.80	32.741 E	-1.444 D	26.364	1440.2
53.0	52.05	32.794 E	-1.469 D	26.408	1440.2
54.0	52.85	32.811 E	-1.468 D	26.422	1440.3
55.0	53.95	32.838 E	-1.482 D	26.444	1440.3
56.0	54.95	32.855 E	-1.477 D	26.458	1440.3
57.0	56.10	32.883 E	-1.445 D	26.479	1440.5
58.0	56.90	32.916 E	-1.450 D	26.506	1440.6
59.0	58.00	32.950 E	-1.448 D	26.534	1440.6
60.0	59.00	32.978 E	-1.470 D	26.557	1440.6
61.0	60.00	33.007 E	-1.471 D	26.580	1440.6
62.0	61.10	33.032 E	-1.494 D	26.601	1440.6
63.0	62.10	33.057 E	-1.484 D	26.621	1440.7
64.0	63.00	33.086 E	-1.492 D	26.645	1440.7



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
65.0	64.15	33.099 E	-1.460 D	26.655	1440.9
66.0	65.00	33.114 E	-1.375 D	26.664	1441.3
67.0	66.25	33.144 E	-1.358 D	26.689	1441.5
68.0	67.05	33.168 E	-1.350 D	26.707	1441.6
69.0	68.25	33.192 E	-1.370 D	26.728	1441.5
70.0	69.05	33.211 E	-1.353 D	26.743	1441.6
71.0	70.25	33.233 E	-1.342 D	26.760	1441.7
72.0	71.00	33.260 E	-1.356 D	26.783	1441.7
73.0	72.25	33.278 E	-1.302 D	26.795	1442.0
74.0	73.10	33.299 E	-1.295 D	26.812	1442.1
75.0	74.20	33.322 E	-1.292 D	26.830	1442.2
76.0	75.25	33.346 E	-1.284 D	26.850	1442.3
77.0	76.20	33.364 E	-1.268 D	26.864	1442.4
78.0	77.35	33.381 E	-1.272 D	26.878	1442.4
79.0	78.25	33.397 E	-1.257 D	26.890	1442.5
80.0	79.25	33.417 E	-1.255 D	26.907	1442.6
81.0	80.30	33.432 E	-1.245 D	26.919	1442.6
82.0	81.35	33.450 E	-1.242 D	26.933	1442.7
83.0	82.20	33.471 E	-1.261 D	26.950	1442.7
84.0	83.35	33.489 E	-1.238 D	26.964	1442.8
85.0	84.45	33.506 E	-1.238 D	26.978	1442.8
86.0	85.35	33.525 E	-1.199 D	26.992	1443.1
87.0	86.35	33.554 E	-1.305 D	27.019	1442.6
88.0	87.25	33.564 E	-1.296 D	27.027	1442.7
89.0	88.55	33.582 E	-1.245 D	27.040	1443.0
90.0	89.45	33.604 E	-1.218 D	27.057	1443.2
91.0	90.50	33.625 E	-1.203 D	27.073	1443.3
92.0	91.30	33.636 E	-1.177 D	27.082	1443.4
93.0	92.40	33.653 E	-1.174 D	27.095	1443.5
94.0	93.45	33.663 E	-1.051 D	27.099	1444.1
95.0	94.35	33.690 E	-1.097 D	27.123	1443.9
96.0	95.50	33.704 E	-1.059 D	27.133	1444.1
97.0	96.40	33.724 E	-1.021 D	27.148	1444.4
98.0	97.45	33.740 E	-1.034 D	27.161	1444.3
99.0	98.60	33.755 E	-0.988 D	27.171	1444.6
100.0	99.40	33.765 E	-0.931 D	27.178	1444.9
101.0	100.65	33.781 D	-0.912 C	27.190	1445.0
102.0	101.50	33.799 D	-0.889 C	27.203	1445.2
103.0	102.65	33.815 D	-0.865 C	27.216	1445.3
104.0	103.55	33.828 D	-0.838 C	27.225	1445.5
105.0	104.65	33.845 D	-0.827 C	27.239	1445.6
106.0	105.70	33.858 D	-0.812 C	27.249	1445.7
107.0	106.65	33.871 D	-0.795 C	27.258	1445.8
108.0	107.55	33.885 D	-0.783 C	27.269	1445.9
109.0	108.75	33.891 D	-0.775 C	27.274	1446.0
110.0	109.55	33.899 D	-0.771 C	27.280	1446.0
111.0	110.80	33.904 D	-0.764 C	27.284	1446.1
112.0	111.60	33.914 D	-0.756 C	27.292	1446.1
113.0	112.80	33.920 D	-0.746 C	27.296	1446.2
114.0	113.60	33.931 D	-0.738 C	27.305	1446.3
115.0	114.85	33.936 D	-0.730 C	27.308	1446.3
116.0	115.65	33.945 D	-0.723 C	27.315	1446.4
117.0	116.80	33.951 D	-0.715 C	27.320	1446.4
118.0	117.70	33.961 D	-0.711 C	27.328	1446.5
119.0	118.75	33.964 D	-0.704 C	27.330	1446.5
120.0	119.95	33.972 D	-0.698 C	27.337	1446.6
121.0	120.75	33.978 D	-0.689 C	27.341	1446.7
122.0	121.95	33.991 D	-0.681 C	27.351	1446.7
123.0	122.90	33.997 D	-0.676 C	27.355	1446.8
124.0	123.95	34.006 D	-0.668 C	27.363	1446.9
125.0	124.75	34.012 D	-0.662 C	27.367	1446.9
126.0	125.80	34.018 D	-0.655 C	27.372	1447.0
127.0	126.95	34.024 D	-0.650 C	27.377	1447.0
128.0	127.90	34.032 D	-0.643 C	27.383	1447.1
129.0	128.80	34.038 D	-0.637 C	27.387	1447.1
130.0	129.95	34.045 D	-0.631 C	27.393	1447.2
131.0	131.00	34.053 D	-0.623 C	27.399	1447.2
132.0	131.95	34.059 D	-0.618 C	27.404	1447.3
133.0	132.90	34.065 D	-0.613 C	27.408	1447.3

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
134.0	134.00	34.071 D	-0.606 C	27.413	1447.4
135.0	135.10	34.078 D	-0.601 C	27.418	1447.5
136.0	136.05	34.083 D	-0.597 C	27.422	1447.5
137.0	137.15	34.089 D	-0.593 C	27.427	1447.5
138.0	138.20	34.094 D	-0.585 C	27.430	1447.6
139.0	139.05	34.099 D	-0.580 C	27.435	1447.6
140.0	140.00	34.104 D	-0.574 C	27.438	1447.7
141.0	141.05	34.113 D	-0.570 C	27.445	1447.7
142.0	142.15	34.119 D	-0.564 C	27.450	1447.8
143.0	143.20	34.125 D	-0.557 C	27.454	1447.9
144.0	144.25	34.132 D	-0.549 C	27.460	1447.9
145.0	145.20	34.138 D	-0.543 C	27.464	1448.0
146.0	146.15	34.143 D	-0.538 C	27.468	1448.0
147.0	147.30	34.150 D	-0.534 C	27.473	1448.1
148.0	148.25	34.159 D	-0.526 C	27.481	1448.1
149.0	149.20	34.164 D	-0.518 C	27.484	1448.2
150.0	150.30	34.171 D	-0.511 C	27.490	1448.2
151.0	151.30	34.179 D	-0.502 C	27.496	1448.3
152.0	152.25	34.187 D	-0.500 C	27.502	1448.4
153.0	153.30	34.187 D	-0.496 C	27.502	1448.4
154.0	154.30	34.196 D	-0.490 C	27.509	1448.4
155.0	155.30	34.202 D	-0.482 C	27.514	1448.5
156.0	156.20	34.214 D	-0.474 C	27.523	1448.6
157.0	157.45	34.220 D	-0.467 C	27.527	1448.6
158.0	158.30	34.228 D	-0.457 C	27.534	1448.7
159.0	159.35	34.236 D	-0.449 C	27.540	1448.8
160.0	160.40	34.247 D	-0.441 C	27.548	1448.8
161.0	161.30	34.252 D	-0.435 C	27.552	1448.9
162.0	162.50	34.261 D	-0.427 C	27.559	1449.0
163.0	163.45	34.266 D	-0.421 C	27.562	1449.0
164.0	164.35	34.274 D	-0.414 C	27.569	1449.1
165.0	165.60	34.284 D	-0.404 C	27.576	1449.2
166.0	166.50	34.293 D	-0.398 C	27.583	1449.2
167.0	167.40	34.300 D	-0.390 C	27.589	1449.3
168.0	168.60	34.306 D	-0.380 C	27.593	1449.3
169.0	169.55	34.316 D	-0.373 C	27.601	1449.4
170.0	170.50	34.324 D	-0.365 C	27.606	1449.5
171.0	171.60	34.331 D	-0.358 C	27.612	1449.5
172.0	172.55	34.337 D	-0.355 C	27.617	1449.6
173.0	173.60	34.340 D	-0.353 C	27.619	1449.6
174.0	174.50	34.343 D	-0.350 C	27.622	1449.6
175.0	175.55	34.353 D	-0.340 C	27.629	1449.7
176.0	176.60	34.362 D	-0.331 C	27.636	1449.8
177.0	177.65	34.367 D	-0.323 C	27.639	1449.8
178.0	178.70	34.372 D	-0.318 C	27.643	1449.9
179.0	179.70	34.377 D	-0.313 C	27.647	1449.9
180.0	180.70	34.385 D	-0.306 C	27.653	1450.0
181.0	181.70	34.390 D	-0.300 C	27.657	1450.0
182.0	182.70	34.396 D	-0.293 C	27.662	1450.1
183.0	183.70	34.404 D	-0.285 C	27.667	1450.2
184.0	184.65	34.411 D	-0.278 C	27.673	1450.2
185.0	185.70	34.418 D	-0.273 C	27.678	1450.3
186.0	186.75	34.422 D	-0.266 C	27.681	1450.3
187.0	187.85	34.432 D	-0.255 C	27.689	1450.4
188.0	188.90	34.433 D	-0.250 C	27.689	1450.5
189.0	189.80	34.439 D	-0.247 C	27.694	1450.5
190.0	190.70	34.443 D	-0.240 C	27.697	1450.5





OCEANOGRAPHIC DATA

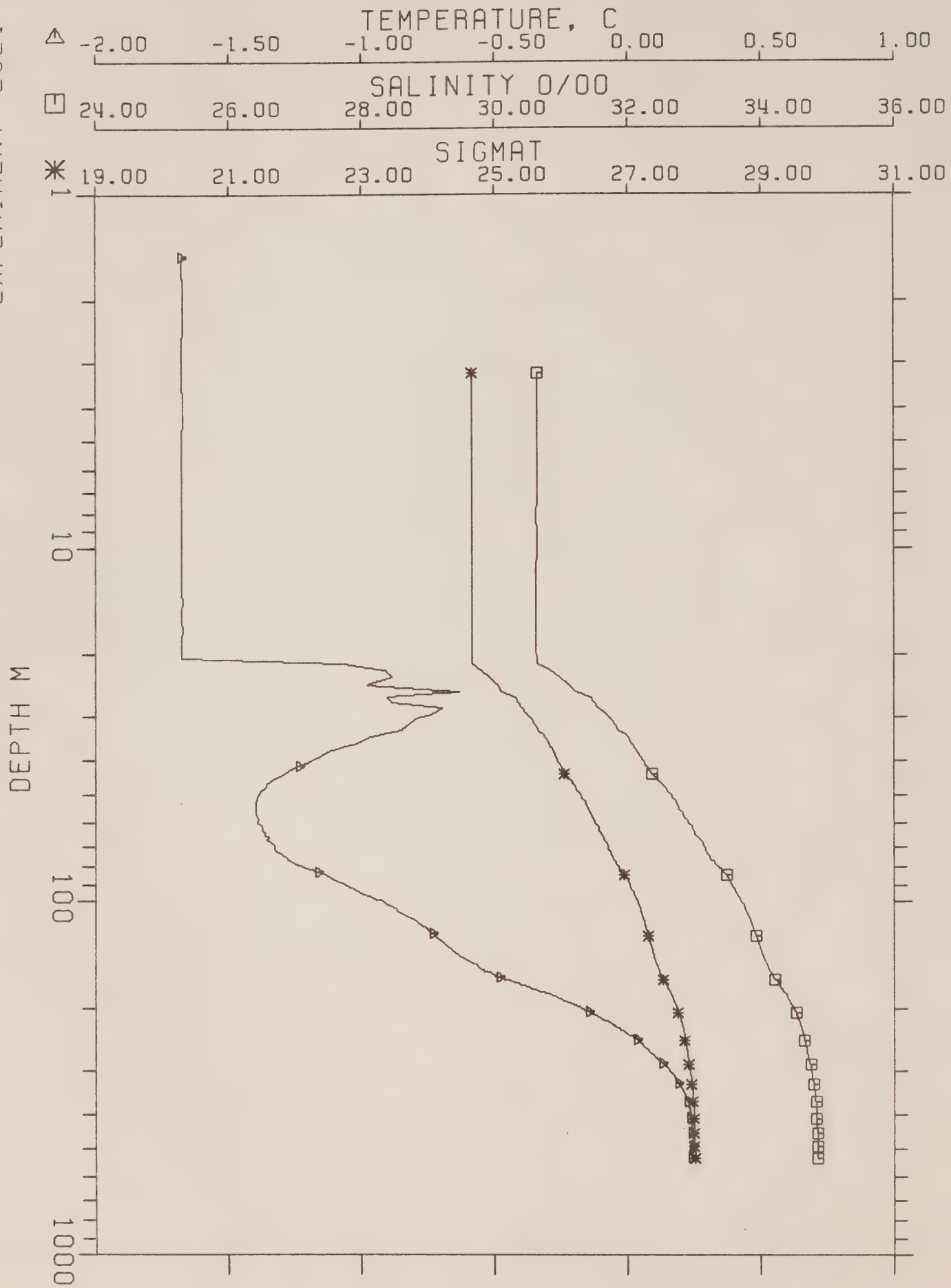
GREELY FIORD







EXPERIMENT 2021



CRUISE 15-76-015

GEELEY FIORD-76

EXPER NO. 2021

LAT N.80-34-00

LONG W.80-20-00

WATER DEPTH 562

DEPTH INCR.

DATE 220376

LOCAL TIME 0930

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
1.5	1.50		-1.673 D		
2.5	2.00		-1.672 D		
3.5	3.20	30.657 E	-1.673 D	24.680	1435.5
4.5	4.15	30.654 E	-1.672 D	24.678	1435.5
5.5	5.20	30.655 E	-1.675 D	24.679	1435.5
6.5	6.25	30.652 E	-1.673 D	24.677	1435.5
7.5	7.20	30.652 E	-1.674 D	24.677	1435.5
8.5	8.00	30.649 E	-1.673 D	24.675	1435.5
9.5	9.10	30.651 E	-1.674 D	24.676	1435.5
10.5	10.30	30.651 E	-1.674 D	24.676	1435.6
11.5	11.25	30.649 E	-1.673 D	24.674	1435.6
12.5	12.30	30.649 E	-1.673 D	24.674	1435.6
13.5	13.40	30.648 E	-1.673 D	24.673	1435.6
14.5	14.30	30.646 E	-1.672 D	24.672	1435.6
15.5	15.25	30.649 E	-1.674 D	24.675	1435.6
16.5	16.30	30.648 E	-1.673 D	24.673	1435.7
17.5	17.15	30.648 E	-1.672 D	24.673	1435.7
18.5	18.20	30.648 E	-1.673 D	24.674	1435.7
19.5	19.40	30.649 E	-1.673 D	24.674	1435.7
20.5	20.45	30.651 E	-1.673 D	24.676	1435.7
21.5	21.30	30.664 E	-1.065 D	24.675	1438.6
22.5	22.25	30.856 E	-0.903 D	24.826	1439.7
23.5	23.25	30.992 E	-0.878 D	24.935	1440.0
24.5	24.50	31.146 E	-0.973 D	25.062	1439.3
25.5	25.40	31.231 E	-0.626 D	25.121	1441.6
26.5	26.40	31.469 E	-0.900 D	25.321	1440.6
27.5	27.30	31.525 E	-0.879 D	25.366	1440.8
28.5	28.35	31.589 E	-0.691 D	25.412	1441.8
29.5	29.45	31.696 E	-0.731 D	25.500	1441.8
30.5	30.40	31.768 E	-0.789 D	25.559	1441.6
31.5	31.55	31.835 E	-0.822 D	25.615	1441.6
32.5	32.60	31.886 E	-0.846 D	25.656	1441.6
33.5	33.55	31.977 E	-0.919 D	25.732	1441.4
34.5	34.55	32.037 E	-0.976 D	25.782	1441.2
35.5	35.55	32.086 E	-1.016 D	25.823	1441.1
36.5	36.55	32.126 E	-1.068 D	25.857	1440.9
37.5	37.55	32.169 E	-1.118 D	25.893	1440.8
38.5	38.55	32.202 E	-1.147 D	25.921	1440.7
39.5	39.55	32.236 E	-1.175 D	25.949	1440.6
40.5	40.50	32.274 E	-1.206 D	25.981	1440.5
41.5	41.50	32.303 E	-1.232 D	26.005	1440.5
42.5	42.50	32.348 E	-1.263 D	26.041	1440.4
43.5	43.50	32.380 E	-1.283 D	26.068	1440.4
44.5	44.50	32.431 E	-1.311 D	26.110	1440.3
45.5	45.50	32.484 E	-1.334 D	26.154	1440.3
46.5	46.50	32.536 E	-1.353 D	26.196	1440.3
47.5	47.50	32.573 E	-1.356 D	26.226	1440.4
48.5	48.55	32.623 E	-1.377 D	26.267	1440.4
49.5	49.60	32.663 E	-1.382 D	26.300	1440.4
50.5	50.70	32.699 E	-1.388 D	26.329	1440.5
51.5	51.80	32.734 E	-1.391 D	26.357	1440.5
52.5	52.85	32.761 E	-1.394 D	26.380	1440.5
53.5	53.80	32.785 E	-1.396 D	26.399	1440.6
54.5	54.80	32.809 E	-1.395 D	26.418	1440.6
55.5	55.80	32.830 E	-1.394 D	26.435	1440.7
56.5	56.85	32.856 E	-1.394 D	26.456	1440.7
57.5	57.80	32.879 E	-1.391 D	26.475	1440.8
58.5	58.70	32.911 E	-1.387 D	26.501	1440.9
59.5	59.85	32.940 E	-1.389 D	26.524	1440.9
60.5	60.75	32.974 E	-1.376 D	26.552	1441.1
61.5	61.75	32.998 E	-1.370 D	26.571	1441.1
62.5	63.00	33.014 E	-1.369 D	26.583	1441.2

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
63.5	63.90	33.029 E	-1.362 D	26.596	1441.3
64.5	65.00	33.047 E	-1.359 D	26.610	1441.3
65.5	65.90	33.074 E	-1.346 D	26.631	1441.4
66.5	66.90	33.113 E	-1.354 D	26.663	1441.5
67.5	67.85	33.142 E	-1.341 D	26.687	1441.6
68.5	68.85	33.164 E	-1.330 D	26.704	1441.7
69.5	70.05	33.179 E	-1.325 D	26.716	1441.7
70.5	70.95	33.190 E	-1.323 D	26.725	1441.8
71.5	72.00	33.206 E	-1.322 D	26.738	1441.8
72.5	73.05	33.226 E	-1.298 D	26.753	1442.0
73.5	74.00	33.240 E	-1.295 D	26.764	1442.0
74.5	74.90	33.262 E	-1.280 D	26.782	1442.2
75.5	76.05	33.286 E	-1.277 D	26.801	1442.2
76.5	77.20	33.311 E	-1.260 D	26.821	1442.4
77.5	78.15	33.342 E	-1.246 D	26.845	1442.5
78.5	79.15	33.369 E	-1.227 D	26.867	1442.6
79.5	80.20	33.395 E	-1.206 D	26.887	1442.8
80.5	81.20	33.430 E	-1.183 D	26.915	1442.9
81.5	82.15	33.456 E	-1.159 D	26.935	1443.1
82.5	83.20	33.481 E	-1.144 D	26.955	1443.2
83.5	84.20	33.499 E	-1.129 D	26.969	1443.3
84.5	85.30	33.520 E	-1.114 D	26.985	1443.5
85.5	86.35	33.535 E	-1.103 D	26.997	1443.6
86.5	87.25	33.552 E	-1.087 D	27.010	1443.7
87.5	88.10	33.566 E	-1.075 D	27.021	1443.8
88.5	89.15	33.579 E	-1.061 D	27.031	1443.9
89.5	90.40	33.600 E	-1.045 D	27.048	1444.0
90.5	91.30	33.614 E	-1.035 D	27.059	1444.1
91.5	92.15	33.626 E	-1.020 D	27.069	1444.2
92.5	93.30	33.641 E	-1.008 D	27.080	1444.3
93.5	94.40	33.656 E	-0.993 D	27.092	1444.3
94.5	95.25	33.668 E	-0.987 D	27.101	1444.4
95.5	96.40	33.683 E	-0.970 D	27.113	1444.5
96.5	97.35	33.696 E	-0.956 D	27.123	1444.5
97.5	98.45	33.715 E	-0.939 D	27.137	1444.8
98.5	99.25	33.729 E	-0.919 D	27.148	1444.9
99.5	100.55	33.743 D	-0.903 C	27.159	1445.0
100.5	101.45	33.750 D	-0.899 C	27.165	1445.1
101.5	102.45	33.762 D	-0.891 C	27.174	1445.1
102.5	103.35	33.771 D	-0.882 C	27.181	1445.2
103.5	104.45	33.785 D	-0.872 C	27.192	1445.3
104.5	105.65	33.794 D	-0.866 C	27.199	1445.3
105.5	106.50	33.801 D	-0.855 C	27.204	1445.4
106.5	107.65	33.813 D	-0.845 C	27.213	1445.5
107.5	108.50	33.822 D	-0.833 C	27.220	1445.6
108.5	109.60	33.832 D	-0.824 C	27.228	1445.7
109.5	110.50	33.842 D	-0.814 C	27.236	1445.7
110.5	111.50	33.850 D	-0.804 C	27.242	1445.8
111.5	112.60	33.860 D	-0.795 C	27.250	1445.9
112.5	113.50	33.869 D	-0.788 C	27.257	1445.9
113.5	114.50	33.876 D	-0.784 C	27.262	1446.0
114.5	115.70	33.883 D	-0.781 C	27.268	1446.0
115.5	116.50	33.886 D	-0.771 C	27.270	1446.1
116.5	117.65	33.899 D	-0.758 C	27.279	1446.2
117.5	118.65	33.903 D	-0.752 C	27.283	1446.2
118.5	119.55	33.909 D	-0.749 C	27.288	1446.3
119.5	120.60	33.920 D	-0.746 C	27.296	1446.3
120.5	121.65	33.926 D	-0.738 C	27.301	1446.4
121.5	122.80	33.936 D	-0.732 C	27.309	1446.4
122.5	123.75	33.944 D	-0.727 C	27.315	1446.5
123.5	124.75	33.950 D	-0.722 C	27.320	1446.5
124.5	125.65	33.956 D	-0.715 C	27.324	1446.6
125.5	126.65	33.960 D	-0.710 C	27.327	1446.6
126.5	127.65	33.964 D	-0.702 C	27.330	1446.7
127.5	128.75	33.971 D	-0.698 C	27.336	1446.7
128.5	129.70	33.980 D	-0.693 C	27.343	1446.8
129.5	130.80	33.984 D	-0.688 C	27.345	1446.8
130.5	131.90	33.989 D	-0.683 C	27.350	1446.9
131.5	133.00	33.996 D	-0.681 C	27.355	1446.9



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
132.5	134.00	34.003 D	-0.675 C	27.361	1447.0
133.5	135.05	34.009 D	-0.666 C	27.365	1447.1
134.5	135.95	34.016 D	-0.661 C	27.370	1447.1
135.5	136.95	34.021 D	-0.655 C	27.375	1447.2
136.5	138.00	34.027 D	-0.649 C	27.379	1447.2
137.5	139.05	34.034 D	-0.644 C	27.384	1447.3
138.5	139.90	34.039 D	-0.639 C	27.388	1447.3
139.5	140.90	34.043 D	-0.634 C	27.391	1447.3
140.5	142.10	34.052 D	-0.629 C	27.398	1447.4
141.5	143.00	34.056 D	-0.621 C	27.402	1447.5
142.5	144.05	34.062 D	-0.616 C	27.406	1447.5
143.5	145.15	34.065 D	-0.612 C	27.408	1447.5
144.5	146.15	34.077 D	-0.601 C	27.417	1447.6
145.5	147.15	34.086 D	-0.592 C	27.425	1447.7
146.5	148.00	34.093 D	-0.584 C	27.430	1447.3
147.5	149.15	34.099 D	-0.581 C	27.434	1447.3
148.5	150.05	34.105 D	-0.571 C	27.438	1447.9
149.5	151.15	34.117 D	-0.563 C	27.448	1447.9
150.5	152.25	34.123 D	-0.562 C	27.453	1448.0
151.5	153.20	34.130 D	-0.555 C	27.458	1448.0
152.5	154.30	34.136 D	-0.547 C	27.463	1448.1
153.5	155.20	34.142 D	-0.540 C	27.467	1448.2
154.5	156.10	34.149 D	-0.539 C	27.473	1448.2
155.5	157.30	34.155 D	-0.530 C	27.478	1448.3
156.5	158.25	34.165 D	-0.517 C	27.485	1448.3
157.5	159.35	34.170 D	-0.511 C	27.489	1448.4
158.5	160.35	34.181 D	-0.503 C	27.497	1448.5
159.5	161.30	34.191 D	-0.492 C	27.505	1448.5
160.5	162.35	34.200 D	-0.490 C	27.512	1448.5
161.5	163.30	34.207 D	-0.479 C	27.517	1448.7
162.5	164.40	34.220 D	-0.467 C	27.528	1448.8
163.5	165.45	34.230 D	-0.453 C	27.535	1448.3
164.5	166.30	34.245 D	-0.441 C	27.546	1448.9
165.5	167.30	34.254 D	-0.433 C	27.553	1449.0
166.5	168.45	34.264 D	-0.413 C	27.560	1449.1
167.5	169.55	34.274 D	-0.411 C	27.568	1449.2
168.5	170.50	34.285 D	-0.406 C	27.577	1449.2
169.5	171.35	34.291 D	-0.399 C	27.582	1449.3
170.5	172.40	34.297 D	-0.388 C	27.586	1449.4
171.5	173.45	34.310 D	-0.372 C	27.595	1449.5
172.5	174.45	34.321 D	-0.366 C	27.604	1449.5
173.5	175.55	34.327 D	-0.357 C	27.609	1449.6
174.5	176.60	34.338 D	-0.344 C	27.617	1449.7
175.5	177.65	34.349 D	-0.334 C	27.626	1449.8
176.5	178.75	34.357 D	-0.326 C	27.631	1449.8
177.5	179.75	34.365 D	-0.316 C	27.638	1449.9
178.5	180.70	34.374 D	-0.307 C	27.645	1450.0
179.5	181.65	34.381 D	-0.293 C	27.650	1450.0
180.5	182.70	34.391 D	-0.287 C	27.657	1450.1
181.5	183.80	34.399 D	-0.280 C	27.664	1450.2
182.5	184.70	34.406 D	-0.271 C	27.669	1450.2
183.5	185.60	34.414 D	-0.265 C	27.675	1450.3
184.5	186.60	34.421 D	-0.256 C	27.680	1450.4
185.5	187.80	34.427 D	-0.249 C	27.684	1450.4
186.5	188.85	34.434 D	-0.243 C	27.690	1450.5
187.5	189.75	34.441 D	-0.237 C	27.695	1450.5
188.5	190.90	34.446 D	-0.231 C	27.699	1450.6
189.5	191.90	34.452 D	-0.224 C	27.704	1450.6
190.5	192.85	34.456 D	-0.214 C	27.706	1450.7
191.5	193.95	34.464 D	-0.207 C	27.713	1450.8
192.5	194.75	34.472 D	-0.201 C	27.718	1450.3
193.5	195.85	34.476 D	-0.193 C	27.722	1450.9
194.5	196.80	34.491 D	-0.186 C	27.733	1451.0
195.5	197.80	34.496 D	-0.179 C	27.737	1451.0
196.5	199.05	34.502 D	-0.173 C	27.741	1451.1
197.5	199.95	34.507 D	-0.168 C	27.745	1451.1
198.5	201.10	34.511 D	-0.163 C	27.748	1451.2
199.5	202.00	34.516 D	-0.159 C	27.752	1451.2
200.5	202.90	34.523 D	-0.152 C	27.757	1451.3

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
201.5	204.00	34.528 D	-0.147 C	27.761	1451.3
202.5	204.95	34.532 D	-0.142 C	27.764	1451.3
203.5	205.10	34.537 D	-0.133 C	27.768	1451.4
204.5	207.05	34.541 D	-0.132 C	27.771	1451.4
205.5	203.15	34.545 D	-0.127 C	27.774	1451.5
206.5	209.10	34.549 D	-0.119 C	27.777	1451.5
207.5	210.10		-0.114 C		
208.5	211.10	34.559 D	-0.110 C	27.785	1451.6
209.5	212.05	34.565 D	-0.105 C	27.789	1451.7
210.5	213.05	34.568 D	-0.100 C	27.792	1451.7
211.5	214.15	34.573 D	-0.096 C	27.795	1451.8
212.5	215.15	34.576 D	-0.090 C	27.797	1451.8
213.5	216.20	34.581 D	-0.084 C	27.801	1451.9
214.5	217.25	34.588 D	-0.077 C	27.807	1451.9
215.5	218.30	34.591 D	-0.072 C	27.808	1452.0
216.5	219.30	34.596 D	-0.066 C	27.812	1452.0
217.5	220.30	34.600 D	-0.062 C	27.815	1452.1
218.5	221.25	34.603 D	-0.058 C	27.817	1452.1
219.5	222.25	34.605 D	-0.055 C	27.819	1452.1
220.5	223.30	34.606 D	-0.050 C	27.819	1452.2
221.5	224.30	34.611 D	-0.048 C	27.824	1452.2
222.5	225.45	34.615 D	-0.044 C	27.826	1452.3
223.5	226.40	34.619 D	-0.036 C	27.830	1452.3
224.5	227.40	34.623 D	-0.032 C	27.832	1452.3
225.5	228.45	34.626 D	-0.028 C	27.835	1452.4
226.5	229.45	34.630 D	-0.024 C	27.837	1452.4
227.5	230.50	34.630 D	-0.020 C	27.837	1452.5
228.5	231.45	34.634 D	-0.016 C	27.840	1452.5
229.5	232.40	34.639 D	-0.012 C	27.844	1452.5
230.5	233.50	34.643 D	-0.008 C	27.848	1452.6
231.5	234.50	34.647 D	-0.005 C	27.850	1452.6
232.5	235.50	34.650 D	-0.002 C	27.852	1452.7
233.5	236.55	34.653 D	0.0 C	27.854	1452.7
234.5	237.60	34.651 D	0.003 C	27.853	1452.7
235.5	238.55	34.656 D	0.011 C	27.857	1452.3
236.5	239.50	34.653 D	0.018 C	27.854	1452.8
237.5	240.50	34.658 D	0.022 C	27.858	1452.9
238.5	241.60	34.659 D	0.024 C	27.859	1452.9
239.5	242.65	34.660 D	0.023 C	27.859	1452.9
240.5	243.55	34.661 D	0.029 C	27.860	1452.9
241.5	244.60	34.663 D	0.033 C	27.861	1453.0
242.5	245.75	34.667 D	0.035 C	27.865	1453.0
243.5	246.75	34.669 D	0.039 C	27.866	1453.1
244.5	247.60	34.673 D	0.042 C	27.868	1453.1
245.5	248.75	34.675 D	0.042 C	27.870	1453.1
246.5	249.75	34.678 D	0.045 C	27.873	1453.1
247.5	250.85	34.681 D	0.049 C	27.875	1453.2
248.5	251.70	34.681 D	0.054 C	27.874	1453.2
249.5	252.75	34.685 D	0.055 C	27.878	1453.2
250.5	253.75	34.685 D	0.057 C	27.877	1453.3
251.5	254.85	34.687 D	0.056 C	27.879	1453.3
252.5	255.95	34.690 D	0.059 C	27.881	1453.3
253.5	256.75	34.690 D	0.063 C	27.882	1453.4
254.5	257.80	34.691 D	0.067 C	27.882	1453.4
255.5	259.00	34.695 D	0.068 C	27.885	1453.4
256.5	259.85	34.696 D	0.070 C	27.886	1453.4
257.5	260.95	34.696 D	0.072 C	27.886	1453.5
258.5	261.85	34.698 D	0.076 C	27.887	1453.5
259.5	263.00	34.702 D	0.073 C	27.891	1453.5
260.5	264.00	34.702 D	0.079 C	27.890	1453.6
261.5	265.00	34.705 D	0.082 C	27.893	1453.6
262.5	266.05	34.708 D	0.083 C	27.895	1453.6
263.5	267.05	34.709 D	0.086 C	27.896	1453.7
264.5	268.05	34.710 D	0.089 C	27.896	1453.7
265.5	269.10	34.713 D	0.091 C	27.898	1453.7
266.5	270.15	34.713 D	0.094 C	27.898	1453.8
267.5	271.10	34.717 D	0.095 C	27.901	1453.8
268.5	272.05	34.716 D	0.099 C	27.901	1453.8
269.5	273.05	34.717 D	0.101 C	27.902	1453.8



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
270.5	274.15	34.720 D	0.102 C	27.903	1453.9
271.5	275.20	34.724 D	0.105 C	27.907	1453.9
272.5	276.05	34.726 D	0.107 C	27.908	1453.9
273.5	277.15	34.726 D	0.110 C	27.908	1454.0
274.5	278.25	34.730 D	0.110 C	27.911	1454.0
275.5	279.25	34.729 D	0.114 C	27.910	1454.0
276.5	280.35	34.733 D	0.115 C	27.913	1454.0
277.5	281.30	34.735 D	0.113 C	27.914	1454.1
278.5	282.30	34.736 D	0.121 C	27.916	1454.1
279.5	283.45	34.740 D	0.122 C	27.919	1454.1
280.5	284.35	34.741 D	0.127 C	27.919	1454.2
281.5	285.35	34.744 D	0.130 C	27.922	1454.2
282.5	286.40	34.746 D	0.133 C	27.923	1454.2
283.5	287.45	34.750 D	0.135 C	27.926	1454.3
284.5	288.45	34.751 D	0.136 C	27.927	1454.3
285.5	289.50	34.753 D	0.139 C	27.928	1454.3
286.5	290.40	34.755 D	0.142 C	27.929	1454.4
287.5	291.35	34.756 D	0.144 C	27.930	1454.4
288.5	292.30	34.756 D	0.147 C	27.930	1454.4
289.5	293.40	34.757 D	0.148 C	27.931	1454.4
290.5	294.35	34.760 D	0.150 C	27.933	1454.5
291.5	295.50	34.763 D	0.151 C	27.935	1454.5
292.5	296.40	34.764 D	0.153 C	27.936	1454.5
293.5	297.50	34.764 D	0.156 C	27.936	1454.5
294.5	298.45	34.767 D	0.156 C	27.938	1454.5
295.5	299.65	34.768 D	0.157 C	27.939	1454.6
296.5	300.55	34.769 D	0.157 C	27.940	1454.6
297.5	301.65	34.770 D	0.158 C	27.941	1454.6
298.5	302.65	34.771 D	0.161 C	27.942	1454.7
299.5	303.65	34.773 D	0.163 C	27.943	1454.7
300.5	304.65	34.775 D	0.164 C	27.945	1454.7
301.5	305.70	34.775 D	0.166 C	27.945	1454.7
302.5	306.65	34.779 D	0.167 C	27.948	1454.8
303.5	307.60	34.777 D	0.171 C	27.946	1454.8
304.5	308.65	34.779 D	0.172 C	27.948	1454.8
305.5	309.75	34.782 D	0.173 C	27.950	1454.9
306.5	310.85	34.784 D	0.173 C	27.951	1454.9
307.5	311.65	34.783 D	0.175 C	27.950	1454.9
308.5	312.65	34.785 D	0.175 C	27.952	1454.9
309.5	313.85	34.786 D	0.177 C	27.953	1454.9
310.5	314.90	34.786 D	0.179 C	27.953	1455.0
311.5	315.85	34.787 D	0.180 C	27.954	1455.0
312.5	316.85	34.787 D	0.180 C	27.953	1455.0
313.5	317.85	34.788 D	0.181 C	27.954	1455.0
314.5	319.00	34.789 D	0.181 C	27.955	1455.1
315.5	319.80	34.790 D	0.183 C	27.956	1455.1
316.5	320.75	34.790 D	0.185 C	27.956	1455.1
317.5	322.00	34.792 D	0.185 C	27.957	1455.1
318.5	322.95	34.795 D	0.186 C	27.960	1455.2
319.5	324.00	34.795 D	0.187 C	27.959	1455.2
320.5	325.05	34.797 D	0.187 C	27.961	1455.2
321.5	326.15	34.797 D	0.189 C	27.961	1455.2
322.5	327.10	34.798 D	0.191 C	27.962	1455.2
323.5	327.95	34.799 D	0.192 C	27.963	1455.3
324.5	328.95	34.798 D	0.195 C	27.962	1455.3
325.5	330.10	34.802 D	0.194 C	27.964	1455.3
326.5	331.00	34.802 D	0.196 C	27.964	1455.3
327.5	332.00	34.803 D	0.197 C	27.965	1455.4
328.5	333.15	34.804 D	0.198 C	27.966	1455.4
329.5	334.05	34.804 D	0.200 C	27.966	1455.4
330.5	335.05	34.806 D	0.200 C	27.968	1455.4
331.5	336.20	34.807 D	0.202 C	27.969	1455.5
332.5	337.15	34.808 D	0.202 C	27.969	1455.5
333.5	338.25	34.809 D	0.203 C	27.970	1455.5
334.5	339.25	34.810 D	0.203 C	27.971	1455.5
335.5	340.30	34.810 D	0.205 C	27.971	1455.5
336.5	341.35	34.811 D	0.206 C	27.971	1455.5
337.5	342.30	34.812 D	0.207 C	27.972	1455.5
338.5	343.30	34.813 D	0.208 C	27.973	1455.5



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
339.5	344.40	34.816 D	0.203 C	27.975	1455.6
340.5	345.35	34.814 D	0.211 C	27.974	1455.7
341.5	346.35	34.816 D	0.212 C	27.975	1455.7
342.5	347.45	34.819 D	0.211 C	27.977	1455.7
343.5	348.50	34.819 D	0.213 C	27.977	1455.7
344.5	349.45	34.820 D	0.213 C	27.978	1455.7
345.5	350.50	34.820 D	0.215 C	27.978	1455.3
346.5	351.50	34.821 D	0.215 C	27.979	1455.3
347.5	352.35	34.822 D	0.216 C	27.979	1455.3
348.5	353.35	34.821 D	0.217 C	27.979	1455.3
349.5	354.50	34.822 D	0.217 C	27.980	1455.3
350.5	355.45	34.823 D	0.218 C	27.981	1455.9
351.5	356.35	34.823 D	0.219 C	27.980	1455.9
352.5	357.60	34.825 D	0.219 C	27.982	1455.9
353.5	358.50	34.825 D	0.221 C	27.982	1455.9
354.5	359.65	34.826 D	0.221 C	27.983	1456.0
355.5	360.55	34.827 D	0.222 C	27.983	1456.0
356.5	361.60	34.827 D	0.223 C	27.983	1456.0
357.5	362.60	34.829 D	0.224 C	27.985	1456.0
358.5	363.60	34.829 D	0.224 C	27.985	1456.0
359.5	364.60	34.829 D	0.226 C	27.985	1456.1
360.5	365.55	34.828 D	0.226 C	27.984	1456.1
361.5	366.55	34.833 D	0.225 C	27.988	1456.1
362.5	367.55	34.831 D	0.226 C	27.987	1456.1
363.5	368.75	34.832 D	0.226 C	27.987	1456.1
364.5	369.60	34.833 D	0.227 C	27.988	1456.2
365.5	370.85	34.834 D	0.227 C	27.989	1456.2
366.5	371.75	34.834 D	0.228 C	27.988	1456.2
367.5	372.90	34.836 D	0.223 C	27.990	1456.2
368.5	373.80	34.835 D	0.223 C	27.990	1456.2
369.5	374.85	34.836 D	0.223 C	27.990	1456.3
370.5	375.85	34.836 D	0.229 C	27.990	1456.3
371.5	376.80	34.838 D	0.229 C	27.992	1456.3
372.5	377.95	34.836 D	0.230 C	27.990	1456.3
373.5	378.90	34.837 D	0.230 C	27.991	1456.3
374.5	379.85	34.838 D	0.230 C	27.992	1456.3
375.5	380.90	34.838 D	0.231 C	27.991	1456.4
376.5	381.95	34.837 D	0.232 C	27.991	1456.4
377.5	382.95	34.838 D	0.233 C	27.992	1456.4
378.5	383.95	34.839 D	0.232 C	27.992	1456.4
379.5	385.05	34.840 D	0.233 C	27.993	1456.4
380.5	386.05	34.839 D	0.233 C	27.993	1456.5
381.5	387.05	34.840 D	0.233 C	27.993	1456.5
382.5	388.10	34.842 D	0.232 C	27.995	1456.5
383.5	389.05	34.842 D	0.233 C	27.995	1456.5
384.5	389.95	34.840 D	0.234 C	27.993	1456.5
385.5	390.95	34.839 D	0.235 C	27.992	1456.6
386.5	392.15	34.843 D	0.233 C	27.996	1456.6
387.5	393.15	34.843 C	0.234 C	27.995	1456.6
388.5	394.20	34.841 D	0.235 C	27.994	1456.6
389.5	395.05	34.843 D	0.234 C	27.996	1456.6
390.5	396.05	34.843 D	0.235 C	27.995	1456.6
391.5	397.15	34.843 D	0.235 C	27.996	1456.7
392.5	398.05	34.843 D	0.235 C	27.996	1456.7
393.5	399.20	34.844 D	0.235 C	27.996	1456.7
394.5	400.20	34.845 D	0.235 C	27.997	1456.7
395.5	401.10	34.842 D	0.237 C	27.994	1456.7
396.5	402.15	34.844 D	0.235 C	27.996	1456.7
397.5	403.20	34.844 D	0.236 C	27.997	1456.8
398.5	404.15	34.844 D	0.237 C	27.996	1456.8
399.5	405.20	34.844 D	0.237 C	27.996	1456.8
400.5	406.40	34.845 D	0.236 C	27.997	1456.8
401.5	407.45	34.845 D	0.237 C	27.997	1456.8
402.5	408.35	34.843 D	0.238 C	27.996	1456.9
403.5	409.45	34.847 D	0.237 C	27.998	1456.9
404.5	410.40	34.845 D	0.233 C	27.997	1456.9
405.5	411.30	34.847 D	0.237 C	27.999	1456.9
406.5	412.50	34.848 D	0.237 C	27.999	1456.9
407.5	413.40	34.845 D	0.239 C	27.997	1456.9

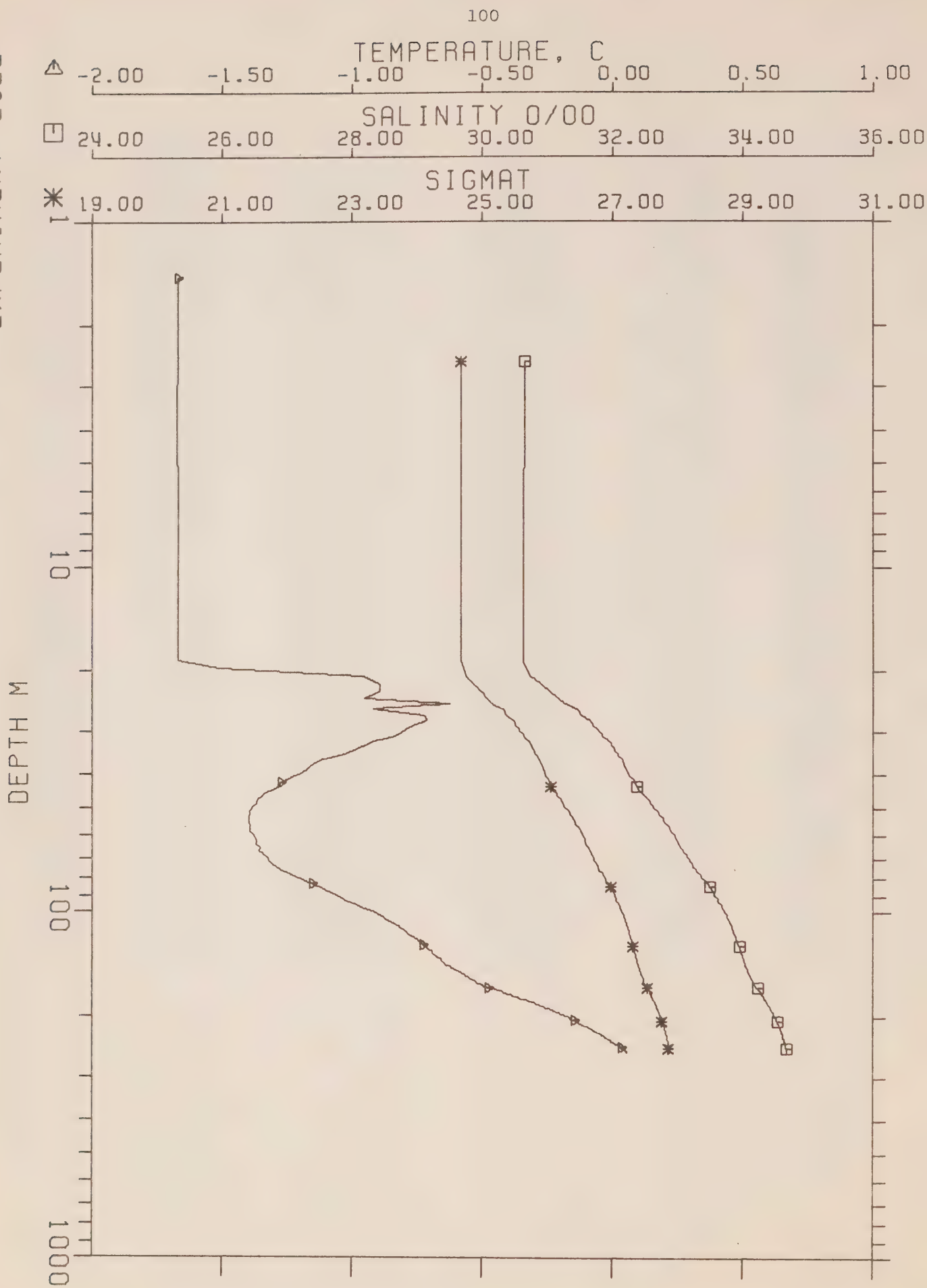
DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
408.5	414.55	34.848 D	0.238 C	28.000	1457.0
409.5	415.60	34.848 D	0.238 C	27.999	1457.0
410.5	416.55	34.847 D	0.239 C	27.999	1457.0
411.5	417.60	34.848 D	0.238 C	27.999	1457.0
412.5	418.60	34.849 D	0.238 C	28.000	1457.0
413.5	419.55	34.849 D	0.239 C	28.000	1457.1
414.5	420.65	34.849 D	0.238 C	28.000	1457.1
415.5	421.50	34.849 D	0.239 C	28.000	1457.1
416.5	422.75	34.848 D	0.239 C	27.999	1457.1
417.5	423.60	34.850 D	0.239 C	28.001	1457.1
418.5	424.55	34.851 D	0.239 C	28.002	1457.1
419.5	425.65	34.851 D	0.239 C	28.002	1457.2
420.5	426.70	34.849 D	0.240 C	28.000	1457.2
421.5	427.60	34.849 D	0.241 C	28.000	1457.2
422.5	428.65	34.851 D	0.240 C	28.001	1457.2
423.5	429.85	34.851 D	0.239 C	28.002	1457.2
424.5	430.70	34.848 D	0.241 C	27.999	1457.2
425.5	431.80	34.849 D	0.241 C	28.000	1457.3
426.5	432.75	34.850 D	0.241 C	28.001	1457.3
427.5	433.70	34.848 D	0.242 C	27.999	1457.3
428.5	434.90	34.853 D	0.240 C	28.003	1457.3
429.5	435.85	34.851 D	0.241 C	28.002	1457.3
430.5	436.85	34.852 D	0.241 C	28.002	1457.4
431.5	438.00	34.851 D	0.241 C	28.002	1457.4
432.5	439.00	34.852 D	0.241 C	28.002	1457.4
433.5	439.95	34.853 D	0.241 C	28.003	1457.4
434.5	440.95	34.854 D	0.241 C	28.004	1457.4
435.5	441.90	34.852 D	0.242 C	28.002	1457.4
436.5	443.00	34.853 D	0.242 C	28.003	1457.5
437.5	443.95	34.855 D	0.241 C	28.005	1457.5
438.5	444.90	34.853 D	0.242 C	28.003	1457.5
439.5	445.90	34.854 D	0.242 C	28.004	1457.5
440.5	447.10	34.854 D	0.241 C	28.004	1457.5
441.5	448.10	34.853 D	0.242 C	28.003	1457.5
442.5	449.05	34.854 D	0.242 C	28.004	1457.6
443.5	449.95	34.854 D	0.242 C	28.004	1457.6
444.5	451.10	34.855 D	0.242 C	28.005	1457.6
445.5	452.15	34.855 D	0.243 C	28.005	1457.6
446.5	453.10	34.855 D	0.242 C	28.005	1457.6
447.5	454.00	34.856 D	0.242 C	28.006	1457.6
448.5	455.05	34.855 D	0.243 C	28.004	1457.7
449.5	456.20	34.855 D	0.243 C	28.005	1457.7
450.5	457.20	34.856 D	0.243 C	28.006	1457.7
451.5	458.10	34.856 D	0.243 C	28.005	1457.7
452.5	459.10	34.855 D	0.243 C	28.005	1457.7
453.5	460.20	34.855 D	0.244 C	28.004	1457.3
454.5	461.25	34.855 D	0.243 C	28.005	1457.3
455.5	462.20	34.857 D	0.242 C	28.007	1457.3
456.5	463.20	34.857 D	0.243 C	28.006	1457.3
457.5	464.20	34.856 D	0.243 C	28.006	1457.3
458.5	465.40	34.857 D	0.243 C	28.006	1457.3
459.5	466.40	34.858 D	0.243 C	28.007	1457.9
460.5	467.40	34.859 D	0.243 C	28.008	1457.9
461.5	468.40	34.858 D	0.243 C	28.007	1457.9
462.5	469.55	34.857 D	0.243 C	28.007	1457.9
463.5	470.45	34.858 D	0.243 C	23.007	1457.9
464.5	471.35	34.858 D	0.243 C	28.007	1457.9
465.5	472.30	34.860 D	0.243 C	28.009	1458.0
466.5	473.45	34.859 D	0.243 C	28.008	1458.0
467.5	474.55	34.858 D	0.244 C	28.007	1458.0
468.5	475.45	34.859 D	0.244 C	28.008	1458.0
469.5	476.35	34.859 D	0.243 C	28.008	1458.0
470.5	477.55	34.858 D	0.243 C	28.008	1458.0
471.5	478.50	34.858 D	0.244 C	23.007	1458.1
472.5	479.70	34.860 D	0.243 C	28.009	1458.1
473.5	480.60	34.859 D	0.243 C	28.008	1458.1
474.5	481.65	34.860 D	0.242 C	28.009	1458.1
475.5	482.55	34.860 D	0.243 C	28.009	1458.1
476.5	483.70	34.860 D	0.243 C	28.009	1458.1

DEPTH	PRESS	SAL	TEMP	SIGMAT	S DUND
477.5	484.50	34.859 D	0.244 C	28.008	1458.2
478.5	485.70	34.861 D	0.243 C	28.009	1458.2
479.5	486.70	34.860 D	0.243 C	28.009	1458.2
480.5	487.70	34.860 D	0.244 C	28.009	1458.2
481.5	488.75	34.862 D	0.243 C	28.010	1458.2
482.5	489.75	34.861 D	0.243 C	28.010	1458.2
483.5	490.70	34.861 D	0.243 C	28.009	1458.3
484.5	491.70	34.859 D	0.244 C	28.008	1458.3
485.5	492.85	34.862 D	0.242 C	28.010	1458.3
486.5	493.85	34.862 D	0.243 C	28.010	1458.3
487.5	494.70	34.861 D	0.243 C	28.010	1458.3
488.5	495.85	34.862 D	0.243 C	28.010	1458.3
489.5	496.90	34.863 D	0.243 C	28.011	1458.4
490.5	497.95	34.862 D	0.243 C	28.011	1458.4
491.5	498.85	34.862 D	0.243 C	28.010	1458.4
492.5	499.80	34.862 D	0.243 C	28.011	1458.4
493.5	500.90	34.860 D	0.243 C	28.009	1458.4
494.5	501.85	34.860 D	0.244 C	28.009	1458.4
495.5	503.00	34.862 D	0.243 C	28.010	1458.5
496.5	504.00	34.861 D	0.243 C	28.010	1458.5
497.5	504.85	34.862 D	0.243 C	28.011	1458.5
498.5	505.85	34.863 D	0.243 C	28.011	1458.5
499.5	507.00	34.864 D	0.242 C	28.012	1458.5
500.5	508.10	34.863 D	0.243 C	28.011	1458.5
501.5	508.95	34.864 D	0.242 C	28.012	1458.6
502.5	510.10	34.862 D	0.243 C	28.011	1458.6
503.5	511.00	34.864 D	0.243 C	28.012	1458.6
504.5	512.05	34.864 D	0.243 C	28.012	1458.6
505.5	513.15	34.865 D	0.243 C	28.013	1458.6
506.5	514.20	34.865 D	0.242 C	28.013	1458.6
507.5	515.10	34.865 D	0.242 C	28.013	1458.7
508.5	516.20	34.865 D	0.242 C	28.013	1458.7
509.5	517.20	34.864 D	0.243 C	28.012	1458.7
510.5	518.15	34.864 D	0.242 C	28.012	1458.7
511.5	519.10	34.864 D	0.243 C	28.012	1458.7
512.5	520.30	34.864 D	0.242 C	28.012	1458.7
513.5	521.15	34.864 D	0.242 C	28.012	1458.8
514.5	522.25	34.865 D	0.242 C	28.013	1458.8
515.5	523.30	34.864 D	0.242 C	28.012	1458.8
516.5	524.30	34.862 D	0.243 C	28.011	1458.8
517.5	525.45	34.867 D	0.241 C	28.014	1458.8
518.5	526.30	34.867 D	0.242 C	28.014	1458.8
519.5	527.30	34.865 D	0.243 C	28.013	1458.9
520.5	528.45	34.866 D	0.241 C	28.014	1458.9
521.5	529.30	34.865 D	0.242 C	28.013	1458.9
522.5	530.30	34.866 D	0.242 C	28.013	1458.9
523.5	531.35	34.865 D	0.243 C	28.013	1458.9
524.5	532.45	34.866 D	0.242 C	28.014	1458.9
525.5	533.30	34.865 D	0.242 C	28.013	1459.0





EXPERIMENT 2022



CRUISE 15-76-015

GREELY FIORD-76

EXPER NO. 2022

LAT N.80-34-00

LONG W.80-20-00

WATER DEPTH 562

DEPTH INCR.

DATE 220376

LOCAL TIME 1015

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
2.8	1.45		-1.670 D		
3.8	2.55	30.654 E	-1.672 D	24.679	1435.4
4.8	3.45	30.654 E	-1.673 D	24.678	1435.5
5.8	4.75	30.651 E	-1.673 D	24.676	1435.5
6.8	5.55	30.650 E	-1.672 D	24.675	1435.5
7.8	6.70	30.648 E	-1.672 D	24.673	1435.5
8.8	7.60	30.649 E	-1.672 D	24.674	1435.5
9.8	8.65	30.650 E	-1.672 D	24.675	1435.5
10.8	9.55	30.647 E	-1.671 D	24.672	1435.6
11.8	10.70	30.648 E	-1.672 D	24.674	1435.6
12.8	11.75	30.648 E	-1.672 D	24.673	1435.6
13.8	12.65	30.646 E	-1.671 D	24.672	1435.6
14.8	13.80	30.648 E	-1.672 D	24.673	1435.6
15.8	14.85	30.648 E	-1.672 D	24.673	1435.6
16.8	15.75	30.648 E	-1.671 D	24.673	1435.7
17.8	16.80	30.647 E	-1.671 D	24.672	1435.7
18.8	17.90	30.649 E	-1.672 D	24.674	1435.7
19.8	18.75	30.648 E	-1.672 D	24.674	1435.7
20.8	19.70		-1.511 D		
21.8	20.65	30.766 E	-0.953 D	24.755	1439.3
22.8	21.75	30.918 E	-0.890 D	24.875	1439.8
23.8	22.90	31.065 E	-0.888 D	24.994	1440.1
24.8	23.95	31.181 E	-0.952 D	25.089	1439.9
25.8	24.85	31.280 E	-0.618 D	25.160	1441.7
26.8	25.80	31.459 E	-0.916 D	25.313	1440.5
27.8	26.95	31.543 E	-0.722 D	25.376	1441.6
28.8	27.80	31.664 E	-0.710 D	25.473	1441.8
29.8	28.90	31.741 E	-0.775 D	25.537	1441.6
30.8	30.05	31.817 E	-0.805 D	25.599	1441.6
31.8	30.95	31.883 E	-0.844 D	25.654	1441.5
32.8	31.95	31.969 E	-0.913 D	25.725	1441.4
33.8	33.00	32.014 E	-0.954 D	25.763	1441.2
34.8	34.05	32.062 E	-0.998 D	25.803	1441.1
35.8	35.00	32.106 E	-1.040 D	25.840	1441.0
36.8	36.00	32.154 E	-1.103 D	25.880	1440.8
37.8	37.05	32.188 E	-1.138 D	25.908	1440.7
38.8	38.15	32.222 E	-1.164 D	25.937	1440.6
39.8	39.15	32.249 E	-1.186 D	25.960	1440.6
40.8	40.10	32.284 E	-1.215 D	25.989	1440.5
41.8	41.05	32.319 E	-1.241 D	26.018	1440.5
42.8	42.15	32.356 E	-1.268 D	26.048	1440.4
43.8	43.00	32.377 E	-1.280 D	26.066	1440.4
44.8	44.10	32.412 E	-1.300 D	26.094	1440.4
45.8	45.15	32.465 E	-1.328 D	26.138	1440.3
46.8	46.15	32.514 E	-1.346 D	26.178	1440.3
47.8	47.15	32.560 E	-1.359 D	26.216	1440.3
48.8	48.25	32.601 E	-1.366 D	26.249	1440.4
49.8	49.35	32.645 E	-1.379 D	26.285	1440.4
50.8	50.30	32.686 E	-1.386 D	26.319	1440.4
51.8	51.15	32.719 E	-1.397 D	26.345	1440.4
52.8	52.15	32.745 E	-1.391 D	26.366	1440.5
53.8	53.20	32.782 E	-1.394 D	26.396	1440.6
54.8	54.30	32.808 E	-1.394 D	26.417	1440.6
55.8	55.35	32.840 E	-1.396 D	26.443	1440.7
56.8	56.20	32.874 E	-1.392 D	26.470	1440.8
57.8	57.25	32.900 E	-1.388 D	26.491	1440.8
58.8	58.45	32.925 E	-1.388 D	26.512	1440.9
59.8	59.25	32.951 E	-1.382 D	26.533	1441.0
60.8	60.25	32.980 E	-1.374 D	26.556	1441.1
61.8	61.50	33.001 E	-1.371 D	26.573	1441.1
62.8	62.40	33.015 E	-1.367 D	26.584	1441.2
63.8	63.45	33.030 E	-1.364 D	26.597	1441.2



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
64.8	64.40	33.049 E	-1.360 D	26.612	1441.3
65.8	65.35	33.075 E	-1.349 D	26.632	1441.4
66.8	66.55	33.108 E	-1.356 D	26.659	1441.4
67.8	67.35	33.141 E	-1.342 D	26.685	1441.6
68.8	68.50	33.158 E	-1.329 D	26.699	1441.7
69.8	69.50	33.177 E	-1.325 D	26.714	1441.7
70.8	70.55	33.190 E	-1.322 D	26.725	1441.8
71.8	71.50	33.213 E	-1.316 D	26.743	1441.9
72.8	72.55	33.231 E	-1.304 D	26.758	1442.0
73.8	73.60	33.248 E	-1.289 D	26.771	1442.1
74.8	74.55	33.272 E	-1.278 D	26.790	1442.2
75.8	75.60	33.297 E	-1.268 D	26.810	1442.3
76.8	76.60	33.329 E	-1.251 D	26.835	1442.4
77.8	77.50	33.359 E	-1.235 D	26.859	1442.5
78.8	78.75	33.380 E	-1.212 D	26.876	1442.7
79.8	79.60	33.400 E	-1.199 D	26.892	1442.8
80.8	80.65	33.422 E	-1.183 D	26.908	1442.9
81.8	81.60	33.453 E	-1.167 D	26.933	1443.1
82.8	82.80	33.478 E	-1.148 D	26.953	1443.2
83.8	83.80	33.501 E	-1.129 D	26.971	1443.3
84.8	84.65	33.523 E	-1.114 D	26.988	1443.5
85.8	85.75	33.535 E	-1.100 D	26.997	1443.6
86.8	86.65	33.553 E	-1.089 D	27.011	1443.6
87.8	87.80	33.568 E	-1.076 D	27.024	1443.8
88.8	88.85	33.581 E	-1.062 D	27.034	1443.9
89.8	89.85	33.598 E	-1.045 D	27.047	1444.0
90.8	90.85	33.613 E	-1.034 D	27.059	1444.1
91.8	91.90	33.625 E	-1.023 D	27.068	1444.1
92.8	92.75	33.642 E	-1.008 D	27.081	1444.3
93.8	93.95	33.655 E	-0.996 D	27.091	1444.3
94.8	94.80	33.675 E	-0.980 D	27.107	1444.5
95.8	96.00	33.691 E	-0.965 D	27.119	1444.6
96.8	96.80	33.700 E	-0.950 D	27.126	1444.7
97.8	98.05	33.717 E	-0.934 D	27.139	1444.8
98.8	98.95	33.729 E	-0.921 D	27.149	1444.9
99.8	100.00	33.742 E	-0.907 D	27.159	1445.0
100.8	101.00	33.755 D	-0.898 C	27.168	1445.1
101.8	101.85	33.766 D	-0.889 C	27.177	1445.1
102.8	103.15	33.775 D	-0.877 C	27.184	1445.2
103.8	103.95	33.785 D	-0.868 C	27.192	1445.3
104.8	104.95	33.795 D	-0.860 C	27.199	1445.4
105.8	106.05	33.803 D	-0.851 C	27.206	1445.4
106.8	107.05	33.816 D	-0.840 C	27.216	1445.5
107.8	108.10	33.825 D	-0.830 C	27.223	1445.6
108.8	109.10	33.833 D	-0.822 C	27.229	1445.7
109.8	110.15	33.845 D	-0.814 C	27.238	1445.7
110.8	111.10	33.854 D	-0.802 C	27.245	1445.8
111.8	112.15	33.861 D	-0.793 C	27.250	1445.9
112.8	113.15	33.869 D	-0.788 C	27.257	1445.9
113.8	114.25	33.876 D	-0.783 C	27.262	1446.0
114.8	115.20	33.883 D	-0.778 C	27.268	1446.0
115.8	116.15	33.891 D	-0.770 C	27.274	1446.1
116.8	117.25	33.899 D	-0.758 C	27.280	1446.2
117.8	118.25	33.905 D	-0.751 C	27.284	1446.2
118.8	119.20	33.914 D	-0.747 C	27.292	1446.3
119.8	120.25	33.921 D	-0.742 C	27.297	1446.3
120.8	121.40	33.930 D	-0.736 C	27.304	1446.4
121.8	122.25	33.935 D	-0.731 C	27.308	1446.4
122.8	123.40	33.945 D	-0.725 C	27.316	1446.5
123.8	124.45	33.952 D	-0.720 C	27.321	1446.6
124.8	125.30	33.957 D	-0.714 C	27.325	1446.6
125.8	126.30	33.962 D	-0.712 C	27.329	1446.6
126.8	127.45	33.967 D	-0.706 C	27.332	1446.7
127.8	128.45	33.972 D	-0.697 C	27.336	1446.8
128.8	129.50	33.983 D	-0.692 C	27.345	1446.8
129.8	130.35	33.985 D	-0.689 C	27.347	1446.8
130.8	131.55	33.995 D	-0.684 C	27.354	1446.9
131.8	132.40	34.000 D	-0.678 C	27.359	1446.9
132.8	133.45	34.002 D	-0.671 C	27.360	1447.0

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
133.8	134.55	34.011 D	-0.663 C	27.367	1447.0
134.8	135.40	34.014 D	-0.661 C	27.369	1447.1
135.8	136.60	34.022 D	-0.657 C	27.376	1447.1
136.8	137.45	34.026 D	-0.653 C	27.378	1447.2
137.8	138.70	34.032 D	-0.650 C	27.383	1447.2
138.8	139.50	34.035 D	-0.643 C	27.385	1447.3
139.8	140.55	34.044 D	-0.639 C	27.392	1447.3
140.8	141.70	34.047 D	-0.633 C	27.395	1447.4
141.8	142.65	34.056 D	-0.622 C	27.401	1447.4
142.8	143.55	34.064 D	-0.618 C	27.408	1447.5
143.8	144.70	34.072 D	-0.609 C	27.414	1447.6
144.8	145.80	34.082 D	-0.598 C	27.422	1447.6
145.8	146.75	34.090 D	-0.592 C	27.427	1447.7
146.8	147.70	34.094 D	-0.586 C	27.430	1447.8
147.8	148.75	34.101 D	-0.580 C	27.436	1447.8
148.8	149.70	34.106 D	-0.570 C	27.440	1447.9
149.8	150.75	34.117 D	-0.566 C	27.449	1447.9
150.8	151.85	34.124 D	-0.562 C	27.454	1448.0
151.8	152.80	34.129 D	-0.557 C	27.458	1448.0
152.8	153.80	34.136 D	-0.548 C	27.463	1448.1
153.8	154.75	34.145 D	-0.544 C	27.470	1448.1
154.8	155.95	34.152 D	-0.539 C	27.475	1448.2
155.8	156.85	34.157 D	-0.529 C	27.479	1448.3
156.8	157.90	34.167 D	-0.525 C	27.487	1448.3
157.8	158.80	34.171 D	-0.519 C	27.490	1448.4
158.8	159.95	34.180 D	-0.517 C	27.497	1448.4
159.8	160.80	34.184 D	-0.505 C	27.500	1448.5
160.8	161.90	34.195 D	-0.497 C	27.508	1448.5
161.8	163.00	34.207 D	-0.488 C	27.518	1448.6
162.8	164.00	34.217 D	-0.475 C	27.525	1448.7
163.8	165.05	34.230 D	-0.462 C	27.535	1448.8
164.8	165.90	34.247 D	-0.444 C	27.548	1448.9
165.8	167.10	34.256 D	-0.434 C	27.555	1449.0
166.8	167.95	34.267 D	-0.426 C	27.564	1449.1
167.8	169.20	34.276 D	-0.418 C	27.570	1449.1
168.8	170.00	34.284 D	-0.410 C	27.576	1449.2
169.8	171.10	34.291 D	-0.399 C	27.582	1449.3
170.8	172.15	34.305 D	-0.389 C	27.593	1449.4
171.8	173.15	34.312 D	-0.383 C	27.598	1449.4
172.8	174.10	34.319 D	-0.372 C	27.603	1449.5
173.8	175.15	34.323 D	-0.361 C	27.606	1449.6
174.8	176.25	34.338 D	-0.358 C	27.618	1449.6
175.8	177.10	34.346 D	-0.344 C	27.624	1449.7
176.8	178.20	34.354 D	-0.330 C	27.630	1449.8
177.8	179.35	34.366 D	-0.321 C	27.639	1449.9
178.8	180.15	34.375 D	-0.311 C	27.645	1449.9
179.8	181.35	34.381 D	-0.302 C	27.650	1450.0
180.8	182.35	34.388 D	-0.296 C	27.656	1450.1
181.8	183.30	34.395 D	-0.290 C	27.661	1450.1
182.8	184.30	34.403 D	-0.280 C	27.667	1450.2
183.8	185.45	34.413 D	-0.274 C	27.675	1450.3
184.8	186.35	34.418 D	-0.265 C	27.678	1450.3
185.8	187.30	34.426 D	-0.258 C	27.684	1450.4
186.8	188.50	34.431 D	-0.249 C	27.688	1450.4
187.8	189.50	34.438 D	-0.240 C	27.693	1450.5
188.8	190.35	34.445 D	-0.231 C	27.698	1450.6
189.8	191.40	34.453 D	-0.226 C	27.705	1450.6
190.8	192.30	34.459 D	-0.219 C	27.709	1450.7
191.8	193.45	34.464 D	-0.213 C	27.713	1450.7
192.8	194.60	34.471 D	-0.207 C	27.718	1450.8
193.8	195.55	34.476 D	-0.199 C	27.722	1450.9
194.8	196.50	34.478 D	-0.191 C	27.723	1450.9
195.8	197.40	34.488 D	-0.184 C	27.731	1451.0
196.8	198.45	34.499 D	-0.178 C	27.740	1451.0
197.8	199.55	34.505 D	-0.172 C	27.744	1451.1
198.8	200.60	34.510 D	-0.167 C	27.748	1451.1
199.8	201.50	34.515 D	-0.162 C	27.752	1451.2
200.8	202.50	34.520 D	-0.158 C	27.755	1451.2
201.8	203.55	34.527 D	-0.153 C	27.760	1451.3

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
202.8	204.65	34.529 D	-0.146 C	27.762	1451.3
203.8	205.75	34.535 D	-0.141 C	27.766	1451.4
204.8	206.65	34.541 D	-0.136 C	27.771	1451.4
205.8	207.65	34.543 D	-0.129 C	27.772	1451.5
206.8	208.80	34.549 D	-0.125 C	27.777	1451.5
207.8	209.65	34.554 D	-0.121 C	27.781	1451.6
208.8	210.65	34.556 D	-0.113 C	27.782	1451.6
209.8	211.85	34.563 D	-0.109 C	27.788	1451.7
210.8	212.85	34.568 D	-0.102 C	27.791	1451.7
211.8	213.70	34.572 D	-0.096 C	27.794	1451.8
212.8	215.00	34.576 D	-0.090 C	27.797	1451.8
213.8	215.85	34.582 D	-0.083 C	27.801	1451.9
214.8	216.90	34.588 D	-0.079 C	27.807	1451.9
215.8	217.90	34.591 D	-0.073 C	27.808	1452.0
216.8	218.90	34.595 D	-0.071 C	27.812	1452.0
217.8	219.95	34.598 D	-0.068 C	27.814	1452.0
218.8	220.95	34.598 D	-0.061 C	27.814	1452.1
219.8	221.90	34.604 D	-0.055 C	27.818	1452.1
220.8	222.85	34.611 D	-0.049 C	27.823	1452.2
221.8	224.05	34.615 D	-0.046 C	27.826	1452.2
222.8	224.90	34.617 D	-0.042 C	27.828	1452.3
223.8	226.05	34.620 D	-0.038 C	27.830	1452.3
224.8	227.10	34.622 D	-0.036 C	27.831	1452.3
225.8	227.95	34.624 D	-0.032 C	27.833	1452.4
226.8	229.10	34.627 D	-0.029 C	27.835	1452.4
227.8	230.00	34.627 D	-0.026 C	27.835	1452.4
228.8	231.10	34.633 D	-0.020 C	27.839	1452.5
229.8	232.20	34.638 D	-0.016 C	27.843	1452.5
230.8	233.15	34.640 D	-0.010 C	27.845	1452.6
231.8	234.15	34.643 D	-0.007 C	27.847	1452.6
232.8	235.10	34.648 D	-0.005 C	27.851	1452.6
233.8	236.35	34.652 D	-0.003 C	27.854	1452.7
234.8	237.10	34.653 D	0.002 C	27.855	1452.7
235.8	238.20	34.657 D	0.004 C	27.858	1452.7
236.8	239.25	34.659 D	0.008 C	27.859	1452.8
237.8	240.15	34.655 D	0.016 C	27.856	1452.8
238.8	241.25	34.657 D	0.020 C	27.857	1452.9
239.8	242.35	34.650 D	0.023 C	27.859	1452.9
240.8	243.20	34.661 D	0.028 C	27.860	1452.9
241.8	244.20	34.663 D	0.032 C	27.861	1453.0
242.8	245.45	34.667 D	0.034 C	27.865	1453.0
243.8	246.40	34.670 D	0.037 C	27.867	1453.0
244.8	247.25	34.673 D	0.041 C	27.868	1453.1
245.8	248.50	34.675 D	0.044 C	27.871	1453.1
246.8	249.40	34.679 D	0.048 C	27.873	1453.2
247.8	250.50	34.682 D	0.051 C	27.876	1453.2
248.8	251.35	34.682 D	0.054 C	27.876	1453.2
249.8	252.55	34.686 D	0.055 C	27.879	1453.2

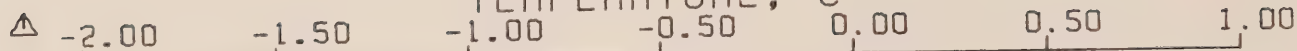




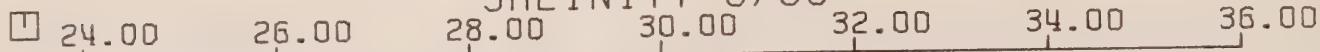
EXPERIMENT 2023

106

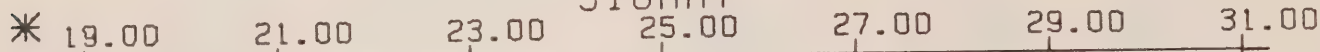
TEMPERATURE, C



SALINITY 0/00



SIGMAT



DEPTH M



CRUISE 15-76-015

GREELY FIORD-76

EXPER NO. 2023

LAT N.80-30-00

LONG W.81-45-00

WATER DEPTH 492

DEPTH INCR.

DATE 230376

LOCAL TIME 0912

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
3.0	2.55		-1.669 D		
4.0	3.55		-1.669 D		
5.0	4.55	30.691 E	-1.670 D	24.708	1435.5
6.0	5.60	30.685 E	-1.669 D	24.703	1435.6
7.0	6.55	30.679 E	-1.669 D	24.698	1435.6
8.0	7.55	30.678 E	-1.669 D	24.698	1435.6
9.0	8.55	30.676 E	-1.668 D	24.696	1435.6
10.0	9.60	30.674 E	-1.669 D	24.695	1435.6
11.0	10.50	30.674 E	-1.668 D	24.694	1435.6
12.0	11.60	30.672 E	-1.668 D	24.693	1435.6
13.0	12.65	30.672 E	-1.669 D	24.693	1435.7
14.0	13.80	30.673 E	-1.669 D	24.694	1435.7
15.0	14.70	30.671 E	-1.666 D	24.692	1435.7
16.0	15.50	30.705 E	-1.150 D	24.710	1438.2
17.0	16.60	30.888 E	-1.076 D	24.856	1438.8
18.0	17.75	30.969 E	-0.996 D	24.920	1439.3
19.0	18.80	31.114 E	-0.934 D	25.035	1439.9
20.0	19.55	31.212 E	-1.019 D	25.116	1439.6
21.0	20.70	31.367 E	-0.979 D	25.240	1440.0
22.0	21.65	31.481 E	-0.961 D	25.332	1440.3
23.0	22.85	31.574 E	-0.924 D	25.407	1440.6
24.0	23.75	31.709 E	-1.012 D	25.518	1440.4
25.0	24.85	31.771 E	-1.023 D	25.569	1440.4
26.0	25.65	31.838 E	-1.058 D	25.624	1440.4
27.0	26.70	31.904 E	-1.059 D	25.677	1440.5
28.0	27.85	31.933 E	-1.054 D	25.700	1440.6
29.0	28.80	32.008 E	-1.011 D	25.759	1440.9
30.0	29.90	32.065 E	-1.137 D	25.809	1440.4
31.0	30.80	32.095 E	-1.179 D	25.835	1440.3
32.0	31.70	32.145 E	-1.206 D	25.876	1440.2
33.0	32.80	32.197 E	-1.242 D	25.919	1440.1
34.0	33.95	32.235 E	-1.279 D	25.951	1440.0
35.0	35.00	32.279 E	-1.306 D	25.987	1440.0
36.0	35.80	32.320 E	-1.325 D	26.020	1440.0
37.0	36.80	32.362 E	-1.341 D	26.055	1440.0
38.0	38.00	32.408 E	-1.383 D	26.093	1439.9
39.0	39.05	32.446 E	-1.399 D	26.125	1439.9
40.0	39.95	32.490 E	-1.415 D	26.160	1439.9
41.0	40.95	32.526 E	-1.427 D	26.190	1439.9
42.0	41.95	32.564 E	-1.430 D	26.220	1439.9
43.0	43.00	32.593 E	-1.437 D	26.244	1439.9
44.0	44.00	32.621 E	-1.439 D	26.267	1440.0
45.0	45.15	32.651 E	-1.439 D	26.292	1440.1
46.0	45.90	32.680 E	-1.439 D	26.315	1440.1
47.0	47.00	32.703 E	-1.440 D	26.333	1440.2
48.0	48.15	32.728 E	-1.439 D	26.353	1440.2
49.0	49.10	32.749 E	-1.439 D	26.371	1440.3
50.0	50.00	32.767 E	-1.438 D	26.385	1440.3
51.0	51.15	32.784 E	-1.437 D	26.399	1440.4
52.0	52.05	32.805 E	-1.433 D	26.415	1440.4
53.0	53.15	32.821 E	-1.430 D	26.429	1440.5
54.0	54.15	32.837 E	-1.429 D	26.442	1440.5
55.0	55.15	32.852 E	-1.428 D	26.454	1440.6
56.0	56.20	32.876 E	-1.426 D	26.473	1440.6
57.0	57.25	32.897 E	-1.423 D	26.490	1440.7
58.0	58.25	32.913 E	-1.413 D	26.503	1440.8
59.0	59.05	32.930 E	-1.406 D	26.517	1440.8
60.0	60.25	32.951 E	-1.397 D	26.533	1440.9
61.0	61.25	32.968 E	-1.392 D	26.547	1441.0
62.0	62.15	32.986 E	-1.381 D	26.561	1441.1
63.0	63.25	33.000 E	-1.375 D	26.572	1441.1
64.0	64.30	33.015 E	-1.371 D	26.585	1441.2



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
65.0	65.30	33.031 E	-1.367 D	26.597	1441.3
66.0	66.30	33.045 E	-1.363 D	26.609	1441.3
67.0	67.20	33.057 E	-1.366 D	26.618	1441.3
68.0	68.30	33.073 E	-1.365 D	26.631	1441.4
69.0	69.35	33.089 E	-1.360 D	26.644	1441.4
70.0	70.40	33.103 E	-1.353 D	26.655	1441.5
71.0	71.50	33.117 E	-1.347 D	26.667	1441.6
72.0	72.45	33.135 E	-1.330 D	26.680	1441.7
73.0	73.35	33.151 E	-1.330 D	26.693	1441.7
74.0	74.30	33.168 E	-1.322 D	26.707	1441.8
75.0	75.55	33.186 E	-1.313 D	26.722	1441.9
76.0	76.40	33.202 E	-1.302 D	26.734	1442.0
77.0	77.45	33.221 E	-1.293 D	26.749	1442.1
78.0	78.50	33.245 E	-1.284 D	26.769	1442.2
79.0	79.45	33.261 E	-1.273 D	26.781	1442.3
80.0	80.50	33.283 E	-1.266 D	26.799	1442.3
81.0	81.55	33.302 E	-1.256 D	26.814	1442.4
82.0	82.40	33.321 E	-1.245 D	26.828	1442.5
83.0	83.55	33.338 E	-1.236 D	26.842	1442.6
84.0	84.55	33.360 E	-1.226 D	26.860	1442.7
85.0	85.60	33.377 E	-1.213 D	26.873	1442.8
86.0	86.45	33.398 E	-1.199 D	26.889	1442.9
87.0	87.75	33.421 E	-1.187 D	26.907	1443.0
88.0	88.45	33.442 E	-1.176 D	26.924	1443.1
89.0	89.60	33.458 E	-1.161 D	26.937	1443.2
90.0	90.70	33.479 E	-1.150 D	26.954	1443.3
91.0	91.65	33.497 E	-1.134 D	26.968	1443.4
92.0	92.65	33.515 E	-1.120 D	26.982	1443.5
93.0	93.60	33.532 E	-1.106 D	26.995	1443.7
94.0	94.70	33.551 E	-1.093 D	27.010	1443.8
95.0	95.60	33.565 E	-1.077 D	27.021	1443.9
96.0	96.65	33.584 E	-1.062 D	27.036	1444.0
97.0	97.75	33.600 E	-1.048 D	27.048	1444.1
98.0	98.80	33.618 E	-1.033 D	27.062	1444.2
99.0	99.70	33.633 E	-1.018 D	27.074	1444.3
100.0	100.85	33.649 D	-1.003 C	27.086	1444.4
101.0	101.85	33.664 D	-0.987 C	27.098	1444.5
102.0	102.85	33.680 D	-0.970 C	27.110	1444.6
103.0	103.75	33.695 D	-0.957 C	27.122	1444.7
104.0	104.85	33.708 D	-0.944 C	27.132	1444.8
105.0	105.95	33.722 D	-0.934 C	27.143	1444.9
106.0	106.90	33.734 D	-0.919 C	27.152	1445.0
107.0	107.95	33.750 D	-0.904 C	27.165	1445.1
108.0	109.05	33.763 D	-0.892 C	27.174	1445.2
109.0	110.05	33.776 D	-0.882 C	27.185	1445.3
110.0	111.00	33.787 D	-0.871 C	27.194	1445.4
111.0	112.00	33.797 D	-0.862 C	27.201	1445.5
112.0	113.05	33.806 D	-0.852 C	27.208	1445.5
113.0	114.15	33.814 D	-0.842 C	27.214	1445.6
114.0	115.10	33.824 D	-0.832 C	27.222	1445.7
115.0	115.95	33.834 D	-0.825 C	27.229	1445.8
116.0	116.90	33.841 D	-0.818 C	27.235	1445.9
117.0	118.00	33.848 D	-0.808 C	27.241	1445.9
118.0	119.10	33.859 D	-0.801 C	27.249	1446.0
119.0	120.05	33.869 D	-0.795 C	27.257	1446.0
120.0	121.10	33.876 D	-0.789 C	27.262	1446.1
121.0	122.15	33.882 D	-0.777 C	27.267	1446.1
122.0	123.10	33.893 D	-0.769 C	27.275	1446.2
123.0	124.05	33.900 D	-0.765 C	27.281	1446.3
124.0	125.20	33.907 D	-0.759 C	27.286	1446.3
125.0	126.20	33.916 D	-0.752 C	27.293	1446.4
126.0	127.20	33.924 D	-0.751 C	27.300	1446.4
127.0	128.25	33.929 D	-0.745 C	27.303	1446.5
128.0	129.10	33.938 D	-0.734 C	27.310	1446.5
129.0	130.30	33.946 D	-0.725 C	27.316	1446.6
130.0	131.15	33.954 D	-0.717 C	27.322	1446.7
131.0	132.30	33.961 D	-0.709 C	27.328	1446.7
132.0	133.30	33.968 D	-0.704 C	27.334	1446.8
133.0	134.20	33.975 D	-0.700 C	27.339	1446.8

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
134.0	135.35	33.980 D	-0.695 C	27.343	1446.9
135.0	136.30	33.984 D	-0.689 C	27.346	1446.9
136.0	137.25	33.991 D	-0.684 C	27.352	1447.0
137.0	138.30	33.998 D	-0.679 C	27.357	1447.0
138.0	139.45	34.003 D	-0.674 C	27.361	1447.1
139.0	140.40	34.009 D	-0.668 C	27.365	1447.1
140.0	141.35	34.015 D	-0.663 C	27.370	1447.2
141.0	142.45	34.019 D	-0.657 C	27.373	1447.2
142.0	143.35	34.026 D	-0.651 C	27.378	1447.3
143.0	144.45	34.035 D	-0.645 C	27.385	1447.3
144.0	145.40	34.040 D	-0.640 C	27.389	1447.4
145.0	146.35	34.044 D	-0.634 C	27.392	1447.4
146.0	147.50	34.051 D	-0.630 C	27.397	1447.5
147.0	148.50	34.057 D	-0.624 C	27.402	1447.5
148.0	149.65	34.064 D	-0.622 C	27.408	1447.6
149.0	150.45	34.066 D	-0.613 C	27.409	1447.6
150.0	151.50	34.074 D	-0.608 C	27.416	1447.7
151.0	152.55	34.079 D	-0.606 C	27.419	1447.7
152.0	153.50	34.086 D	-0.601 C	27.424	1447.8
153.0	154.65	34.093 D	-0.594 C	27.430	1447.8
154.0	155.45	34.098 D	-0.587 C	27.434	1447.9
155.0	156.65	34.104 D	-0.584 C	27.438	1447.9
156.0	157.60	34.113 D	-0.572 C	27.445	1448.0
157.0	158.60	34.118 D	-0.569 C	27.449	1448.0
158.0	159.70	34.126 D	-0.564 C	27.455	1448.1
159.0	160.70	34.131 D	-0.558 C	27.460	1448.1
160.0	161.75	34.137 D	-0.551 C	27.464	1448.2
161.0	162.70	34.141 D	-0.543 C	27.467	1448.3
162.0	163.70	34.149 D	-0.537 C	27.473	1448.3
163.0	164.65	34.153 D	-0.532 C	27.476	1448.4
164.0	165.80	34.159 D	-0.525 C	27.481	1448.4
165.0	166.70	34.167 D	-0.518 C	27.486	1448.5
166.0	167.80	34.177 D	-0.511 C	27.494	1448.5
167.0	168.90	34.186 D	-0.504 C	27.501	1448.6
168.0	169.80	34.192 D	-0.500 C	27.506	1448.6
169.0	170.80	34.198 D	-0.494 C	27.511	1448.7
170.0	171.90	34.207 D	-0.487 C	27.517	1448.8
171.0	172.95	34.215 D	-0.476 C	27.524	1448.8
172.0	173.90	34.219 D	-0.472 C	27.527	1448.9
173.0	174.85	34.229 D	-0.464 C	27.535	1449.0
174.0	175.85	34.236 D	-0.455 C	27.540	1449.0
175.0	176.95	34.247 D	-0.447 C	27.548	1449.1
176.0	177.85	34.258 D	-0.437 C	27.557	1449.2
177.0	179.00	34.269 D	-0.427 C	27.565	1449.2
178.0	179.95	34.270 D	-0.425 C	27.566	1449.3
179.0	181.00	34.285 D	-0.408 C	27.577	1449.4
180.0	182.10	34.305 D	-0.389 C	27.592	1449.5
181.0	183.10	34.312 D	-0.384 C	27.598	1449.6
182.0	184.10	34.316 D	-0.377 C	27.601	1449.6
183.0	184.90	34.330 D	-0.363 C	27.612	1449.7
184.0	186.10	34.340 D	-0.351 C	27.619	1449.8
185.0	187.10	34.350 D	-0.341 C	27.627	1449.9
186.0	188.20	34.362 D	-0.328 C	27.636	1450.0
187.0	189.10	34.374 D	-0.320 C	27.645	1450.1
188.0	190.00	34.379 D	-0.316 C	27.649	1450.1
189.0	191.20	34.385 D	-0.303 C	27.654	1450.2
190.0	192.20	34.394 D	-0.301 C	27.660	1450.2
191.0	193.20	34.399 D	-0.295 C	27.664	1450.3
192.0	194.25	34.406 D	-0.282 C	27.669	1450.4
193.0	195.20	34.418 D	-0.272 C	27.679	1450.4
194.0	196.25	34.420 D	-0.268 C	27.680	1450.5
195.0	197.30	34.429 D	-0.261 C	27.687	1450.5
196.0	198.35	34.434 D	-0.253 C	27.690	1450.6
197.0	199.25	34.441 D	-0.241 C	27.696	1450.7
198.0	200.25	34.449 D	-0.232 C	27.701	1450.7
199.0	201.35	34.457 D	-0.222 C	27.708	1450.8
200.0	202.25	34.466 D	-0.214 C	27.715	1450.9
201.0	203.35	34.474 D	-0.205 C	27.720	1451.0
202.0	204.35	34.480 D	-0.196 C	27.725	1451.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
203.0	205.50	34.494 D	-0.189 C	27.735	1451.1
204.0	206.40	34.501 D	-0.184 C	27.742	1451.1
205.0	207.45	34.504 D	-0.178 C	27.743	1451.2
206.0	208.35	34.509 D	-0.174 C	27.747	1451.2
207.0	209.50	34.514 D	-0.168 C	27.751	1451.3
208.0	210.35	34.522 D	-0.160 C	27.757	1451.3
209.0	211.45	34.529 D	-0.152 C	27.763	1451.4
210.0	212.40	34.534 D	-0.146 C	27.766	1451.5
211.0	213.45	34.539 D	-0.141 C	27.770	1451.5
212.0	214.55	34.544 D	-0.131 C	27.773	1451.6
213.0	215.45	34.548 D	-0.124 C	27.777	1451.6
214.0	216.60	34.556 D	-0.116 C	27.782	1451.7
215.0	217.55	34.561 D	-0.106 C	27.786	1451.8
216.0	218.60	34.567 D	-0.103 C	27.791	1451.8
217.0	219.75	34.571 D	-0.097 C	27.794	1451.9
218.0	220.50	34.575 D	-0.095 C	27.797	1451.9
219.0	221.70	34.578 D	-0.088 C	27.799	1451.9
220.0	222.60	34.583 D	-0.083 C	27.803	1452.0
221.0	223.70	34.588 D	-0.079 C	27.807	1452.0
222.0	224.70	34.592 D	-0.073 C	27.810	1452.1
223.0	225.65	34.597 D	-0.070 C	27.813	1452.1
224.0	226.80	34.599 D	-0.065 C	27.815	1452.2
225.0	227.70	34.601 D	-0.058 C	27.816	1452.2
226.0	228.80	34.605 D	-0.056 C	27.819	1452.2
227.0	229.80	34.608 D	-0.052 C	27.821	1452.3
228.0	230.85	34.612 D	-0.048 C	27.824	1452.3
229.0	231.70	34.614 D	-0.043 C	27.826	1452.4
230.0	232.95	34.621 D	-0.038 C	27.831	1452.4
231.0	233.75	34.622 D	-0.031 C	27.832	1452.5
232.0	234.80	34.626 D	-0.030 C	27.835	1452.5
233.0	235.95	34.629 D	-0.027 C	27.837	1452.5
234.0	236.85	34.631 D	-0.021 C	27.838	1452.6
235.0	237.80	34.635 D	-0.018 C	27.841	1452.6
236.0	238.90	34.640 D	-0.014 C	27.845	1452.6
237.0	240.05	34.642 D	-0.009 C	27.847	1452.7
238.0	240.95	34.645 D	-0.006 C	27.849	1452.7
239.0	242.05	34.650 D	-0.003 C	27.852	1452.8
240.0	243.00	34.646 D	0.010 C	27.849	1452.8
241.0	244.10	34.657 D	0.005 C	27.858	1452.8
242.0	245.10	34.656 D	0.013 C	27.856	1452.9
243.0	246.05	34.658 D	0.017 C	27.858	1452.9
244.0	247.15	34.657 D	0.022 C	27.857	1453.0
245.0	247.95	34.661 D	0.023 C	27.860	1453.0
246.0	249.15	34.660 D	0.028 C	27.859	1453.0
247.0	250.10	34.665 D	0.031 C	27.863	1453.1
248.0	251.20	34.670 D	0.034 C	27.866	1453.1
249.0	252.15	34.670 D	0.039 C	27.867	1453.1
250.0	253.05	34.673 D	0.044 C	27.869	1453.2
251.0	254.20	34.678 D	0.046 C	27.873	1453.2
252.0	255.20	34.679 D	0.051 C	27.873	1453.3
253.0	256.20	34.682 D	0.053 C	27.876	1453.3
254.0	257.25	34.683 D	0.059 C	27.876	1453.3
255.0	258.25	34.689 D	0.061 C	27.881	1453.4
256.0	259.25	34.690 D	0.063 C	27.882	1453.4
257.0	260.25	34.695 D	0.067 C	27.885	1453.4
258.0	261.40	34.698 D	0.069 C	27.887	1453.5
259.0	262.15	34.700 D	0.072 C	27.889	1453.5
260.0	263.35	34.701 D	0.075 C	27.890	1453.5
261.0	264.45	34.703 D	0.077 C	27.891	1453.6
262.0	265.35	34.703 D	0.079 C	27.891	1453.6
263.0	266.35	34.706 D	0.083 C	27.893	1453.6
264.0	267.50	34.708 D	0.085 C	27.894	1453.7
265.0	268.40	34.710 D	0.087 C	27.897	1453.7
266.0	269.45	34.711 D	0.091 C	27.897	1453.7
267.0	270.45	34.715 D	0.093 C	27.900	1453.8
268.0	271.60	34.718 D	0.096 C	27.902	1453.8
269.0	272.55	34.722 D	0.097 C	27.906	1453.8
270.0	273.40	34.723 D	0.100 C	27.906	1453.8
271.0	274.50	34.721 D	0.102 C	27.904	1453.9



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
272.0	275.50	34.724 D	0.105 C	27.907	1453.9
273.0	276.45	34.727 D	0.108 C	27.909	1453.9
274.0	277.55	34.731 D	0.112 C	27.912	1454.0
275.0	278.55	34.733 D	0.112 C	27.914	1454.0
276.0	279.65	34.736 D	0.116 C	27.916	1454.0
277.0	280.60	34.736 D	0.119 C	27.916	1454.1
278.0	281.45	34.738 D	0.120 C	27.917	1454.1
279.0	282.70	34.740 D	0.124 C	27.918	1454.1
280.0	283.50	34.741 D	0.126 C	27.919	1454.2
281.0	284.70	34.745 D	0.128 C	27.923	1454.2
282.0	285.70	34.748 D	0.131 C	27.925	1454.2
283.0	286.65	34.749 D	0.133 C	27.925	1454.2
284.0	287.75	34.751 D	0.133 C	27.927	1454.3
285.0	288.80	34.752 D	0.135 C	27.928	1454.3
286.0	289.75	34.752 D	0.138 C	27.928	1454.3
287.0	290.70	34.756 D	0.139 C	27.931	1454.4
288.0	291.85	34.756 D	0.141 C	27.931	1454.4
289.0	292.70	34.759 D	0.143 C	27.933	1454.4
290.0	293.95	34.762 D	0.145 C	27.935	1454.4
291.0	294.85	34.762 D	0.148 C	27.935	1454.5
292.0	295.85	34.762 D	0.151 C	27.935	1454.5
293.0	296.80	34.766 D	0.154 C	27.938	1454.5
294.0	297.90	34.769 D	0.154 C	27.940	1454.6
295.0	299.00	34.771 D	0.154 C	27.942	1454.6
296.0	299.95	34.770 D	0.156 C	27.941	1454.6
297.0	301.05	34.773 D	0.157 C	27.943	1454.6
298.0	302.00	34.774 D	0.160 C	27.944	1454.7
299.0	303.10	34.775 D	0.161 C	27.945	1454.7
300.0	303.95	34.777 D	0.164 C	27.946	1454.7
301.0	304.95	34.776 D	0.168 C	27.945	1454.7
302.0	306.15	34.781 D	0.167 C	27.949	1454.8
303.0	307.10	34.784 D	0.169 C	27.951	1454.8
304.0	308.15	34.785 D	0.172 C	27.953	1454.8
305.0	309.00	34.783 D	0.176 C	27.951	1454.9
306.0	310.15	34.787 D	0.176 C	27.953	1454.9
307.0	311.10	34.787 D	0.178 C	27.953	1454.9
308.0	312.20	34.789 D	0.179 C	27.955	1454.9
309.0	313.15	34.789 D	0.180 C	27.955	1455.0
310.0	314.15	34.790 D	0.182 C	27.956	1455.0
311.0	315.15	34.792 D	0.184 C	27.957	1455.0
312.0	316.30	34.793 D	0.185 C	27.958	1455.0
313.0	317.15	34.793 D	0.186 C	27.958	1455.1
314.0	318.25	34.795 D	0.187 C	27.960	1455.1
315.0	319.15	34.796 D	0.188 C	27.960	1455.1
316.0	320.35	34.797 D	0.189 C	27.961	1455.1
317.0	321.30	34.798 D	0.190 C	27.962	1455.1
318.0	322.40	34.802 D	0.190 C	27.965	1455.2
319.0	323.40	34.803 D	0.192 C	27.966	1455.2
320.0	324.35	34.802 D	0.194 C	27.965	1455.2
321.0	325.35	34.805 D	0.195 C	27.967	1455.2
322.0	326.25	34.803 D	0.197 C	27.966	1455.3
323.0	327.40	34.803 D	0.193 C	27.965	1455.3
324.0	328.45	34.805 D	0.198 C	27.967	1455.3
325.0	329.50	34.806 D	0.198 C	27.968	1455.3
326.0	330.45	34.808 D	0.199 C	27.970	1455.4
327.0	331.50	34.810 D	0.201 C	27.971	1455.4
328.0	332.45	34.810 D	0.203 C	27.971	1455.4
329.0	333.55	34.811 D	0.203 C	27.971	1455.4
330.0	334.40	34.812 D	0.204 C	27.972	1455.4
331.0	335.45	34.812 D	0.206 C	27.972	1455.5
332.0	336.55	34.813 D	0.207 C	27.973	1455.5
333.0	337.65	34.815 D	0.207 C	27.975	1455.5
334.0	338.55	34.814 D	0.209 C	27.973	1455.5
335.0	339.65	34.815 D	0.210 C	27.974	1455.6
336.0	340.60	34.818 D	0.209 C	27.977	1455.6
337.0	341.65	34.818 D	0.211 C	27.977	1455.6
338.0	342.65	34.818 D	0.212 C	27.976	1455.6
339.0	343.65	34.820 D	0.212 C	27.978	1455.6
340.0	344.70	34.820 D	0.214 C	27.978	1455.7

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
341.0	345.55	34.815 D	0.214 C	27.978	1455.7
342.0	346.75	34.822 D	0.214 C	27.979	1455.7
343.0	347.75	34.821 D	0.215 C	27.979	1455.7
344.0	348.75	34.823 D	0.217 C	27.980	1455.8
345.0	349.70	34.824 D	0.217 C	27.981	1455.8
346.0	350.85	34.827 D	0.215 C	27.933	1455.8
347.0	351.75	34.825 D	0.217 C	27.932	1455.8
348.0	352.80	34.825 D	0.219 C	27.982	1455.8
349.0	353.75	34.825 D	0.220 C	27.982	1455.9
350.0	354.85	34.828 D	0.218 C	27.984	1455.9
351.0	355.75	34.827 D	0.221 C	27.983	1455.9
352.0	356.80	34.829 D	0.221 C	27.985	1455.9
353.0	358.00	34.827 D	0.222 C	27.984	1455.9
354.0	358.85	34.828 D	0.223 C	27.984	1456.0
355.0	359.85	34.829 D	0.223 C	27.985	1456.0
356.0	360.90	34.831 D	0.223 C	27.987	1456.0
357.0	362.05	34.831 D	0.224 C	27.987	1456.0
358.0	362.85	34.831 D	0.225 C	27.986	1456.0
359.0	364.10	34.832 D	0.225 C	27.987	1456.1
360.0	364.95	34.828 D	0.225 C	27.984	1456.1
361.0	366.10	34.835 D	0.225 C	27.989	1456.1
362.0	367.00	34.834 D	0.226 C	27.989	1456.1
363.0	367.95	34.833 D	0.227 C	27.988	1456.1
364.0	369.10	34.834 D	0.228 C	27.989	1456.2
365.0	370.10	34.836 D	0.227 C	27.990	1456.2
366.0	371.10	34.837 D	0.227 C	27.991	1456.2
367.0	372.10	34.835 D	0.229 C	27.990	1456.2
368.0	373.00	34.837 D	0.228 C	27.991	1456.2
369.0	374.00	34.838 D	0.228 C	27.992	1456.2
370.0	375.15	34.836 D	0.230 C	27.991	1456.3
371.0	376.15	34.837 D	0.230 C	27.991	1456.3
372.0	377.25	34.838 D	0.230 C	27.992	1456.3
373.0	378.20	34.838 D	0.231 C	27.992	1456.3
374.0	379.20	34.840 D	0.230 C	27.993	1456.3
375.0	380.10	34.840 D	0.231 C	27.993	1456.4
376.0	381.10	34.839 D	0.232 C	27.993	1456.4
377.0	382.25	34.840 D	0.233 C	27.993	1456.4
378.0	383.30	34.840 D	0.233 C	27.993	1456.4
379.0	384.35	34.840 D	0.233 C	27.994	1456.4
380.0	385.40	34.842 D	0.231 C	27.995	1456.4
381.0	386.35	34.843 D	0.232 C	27.996	1456.5
382.0	387.40	34.842 D	0.234 C	27.995	1456.5
383.0	388.40	34.843 D	0.232 C	27.996	1456.5
384.0	389.30	34.843 D	0.233 C	27.996	1456.5
385.0	390.45	34.843 D	0.234 C	27.995	1456.5
386.0	391.45	34.846 D	0.233 C	27.998	1456.6
387.0	392.30	34.843 D	0.234 C	27.996	1456.6
388.0	393.55	34.847 D	0.234 C	27.999	1456.6
389.0	394.55	34.846 D	0.234 C	27.998	1456.6
390.0	395.40	34.844 D	0.235 C	27.997	1456.6
391.0	396.60	34.847 D	0.235 C	27.998	1456.7
392.0	397.60	34.846 D	0.236 C	27.998	1456.7
393.0	398.40	34.846 D	0.236 C	27.998	1456.7
394.0	399.70	34.848 D	0.236 C	27.999	1456.7
395.0	400.65	34.847 D	0.236 C	27.999	1456.7
396.0	401.50	34.846 D	0.237 C	27.998	1456.7
397.0	402.65	34.848 D	0.237 C	27.999	1456.8
398.0	403.55	34.846 D	0.238 C	27.998	1456.8
399.0	404.55	34.847 D	0.238 C	27.999	1456.8
400.0	405.65	34.848 D	0.238 C	27.999	1456.8
401.0	406.65	34.847 D	0.238 C	27.999	1456.8
402.0	407.80	34.849 D	0.237 C	28.000	1456.9
403.0	409.70	34.850 D	0.237 C	28.001	1456.9
404.0	409.70	34.851 D	0.238 C	28.002	1456.9
405.0	410.75	34.848 D	0.240 C	28.000	1456.9
406.0	411.80	34.850 D	0.238 C	28.001	1456.9
407.0	412.80	34.851 D	0.238 C	28.002	1456.9
408.0	413.70	34.849 D	0.240 C	28.000	1457.0
409.0	414.90	34.854 D	0.237 C	28.004	1457.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
410.0	415.70	34.852 D	0.233 C	28.003	1457.0
411.0	416.90	34.854 D	0.237 C	28.004	1457.0
412.0	417.85	34.851 D	0.240 C	28.002	1457.0
413.0	418.80	34.851 D	0.241 C	28.002	1457.1
414.0	420.00	34.853 D	0.240 C	28.003	1457.1
415.0	420.90	34.851 D	0.241 C	28.002	1457.1
416.0	421.85	34.853 D	0.240 C	28.003	1457.1
417.0	423.05	34.854 D	0.240 C	28.004	1457.1
418.0	423.90	34.854 D	0.241 C	28.004	1457.1
419.0	425.05	34.853 D	0.241 C	28.003	1457.2
420.0	426.00	34.853 D	0.242 C	28.003	1457.2
421.0	426.95	34.854 D	0.240 C	28.004	1457.2
422.0	428.05	34.854 D	0.241 C	28.004	1457.2
423.0	429.15	34.855 D	0.241 C	28.005	1457.2
424.0	430.00	34.856 D	0.241 C	28.006	1457.2
425.0	431.15	34.856 D	0.240 C	28.006	1457.3
426.0	432.15	34.855 D	0.242 C	28.005	1457.3
427.0	433.05	34.855 D	0.241 C	28.005	1457.3
428.0	434.20	34.855 D	0.241 C	28.005	1457.3
429.0	435.15	34.857 D	0.241 C	28.007	1457.3
430.0	436.30	34.856 D	0.240 C	28.006	1457.3
431.0	437.25	34.856 D	0.243 C	28.006	1457.4
432.0	438.05	34.856 D	0.242 C	28.005	1457.4
433.0	439.10	34.856 D	0.242 C	28.006	1457.4
434.0	440.20	34.856 D	0.242 C	28.005	1457.4
435.0	441.30	34.857 D	0.243 C	28.006	1457.4
436.0	442.25	34.859 D	0.241 C	28.008	1457.4
437.0	443.20	34.857 D	0.243 C	28.007	1457.5
438.0	444.35	34.858 D	0.242 C	28.007	1457.5
439.0	445.35	34.860 D	0.241 C	28.009	1457.5
440.0	446.20	34.859 D	0.242 C	28.008	1457.5
441.0	447.40	34.858 D	0.243 C	28.007	1457.5
442.0	448.45	34.858 D	0.243 C	28.007	1457.6
443.0	449.45	34.858 D	0.243 C	28.007	1457.6
444.0	450.40	34.859 D	0.243 C	28.008	1457.6
445.0	451.40	34.857 D	0.244 C	28.006	1457.6
446.0	452.45	34.860 D	0.242 C	28.009	1457.6
447.0	453.30	34.860 D	0.243 C	28.009	1457.6
448.0	454.55	34.860 D	0.243 C	28.009	1457.7
449.0	455.40	34.857 D	0.244 C	28.007	1457.7
450.0	456.65	34.861 D	0.243 C	28.009	1457.7
451.0	457.55	34.860 D	0.243 C	28.009	1457.7
452.0	458.60	34.862 D	0.242 C	28.011	1457.7
453.0	459.50	34.862 D	0.242 C	28.010	1457.7
454.0	460.50	34.860 D	0.244 C	28.009	1457.8
455.0	461.65	34.863 D	0.241 C	28.011	1457.8
456.0	462.45	34.860 D	0.243 C	28.009	1457.8
457.0	463.60	34.861 D	0.243 C	28.009	1457.8
458.0	464.65	34.862 D	0.243 C	28.010	1457.8
459.0	465.70	34.862 D	0.242 C	28.011	1457.8
460.0	466.75	34.862 D	0.242 C	28.010	1457.9
461.0	467.75	34.861 D	0.243 C	28.010	1457.9
462.0	468.60	34.860 D	0.244 C	28.008	1457.9
463.0	469.75	34.862 D	0.243 C	28.010	1457.9
464.0	470.60	34.861 D	0.244 C	28.010	1457.9
465.0	471.80	34.862 D	0.243 C	28.010	1457.9
466.0	472.85	34.861 D	0.243 C	28.010	1458.0
467.0	473.85	34.863 D	0.242 C	28.011	1458.0
468.0	474.75	34.863 D	0.243 C	28.011	1458.0
469.0	475.80	34.863 D	0.242 C	28.012	1458.0
470.0	476.85	34.860 D	0.244 C	28.009	1458.0



EXPERIMENT 2024

114

TEMPERATURE, C

-2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00

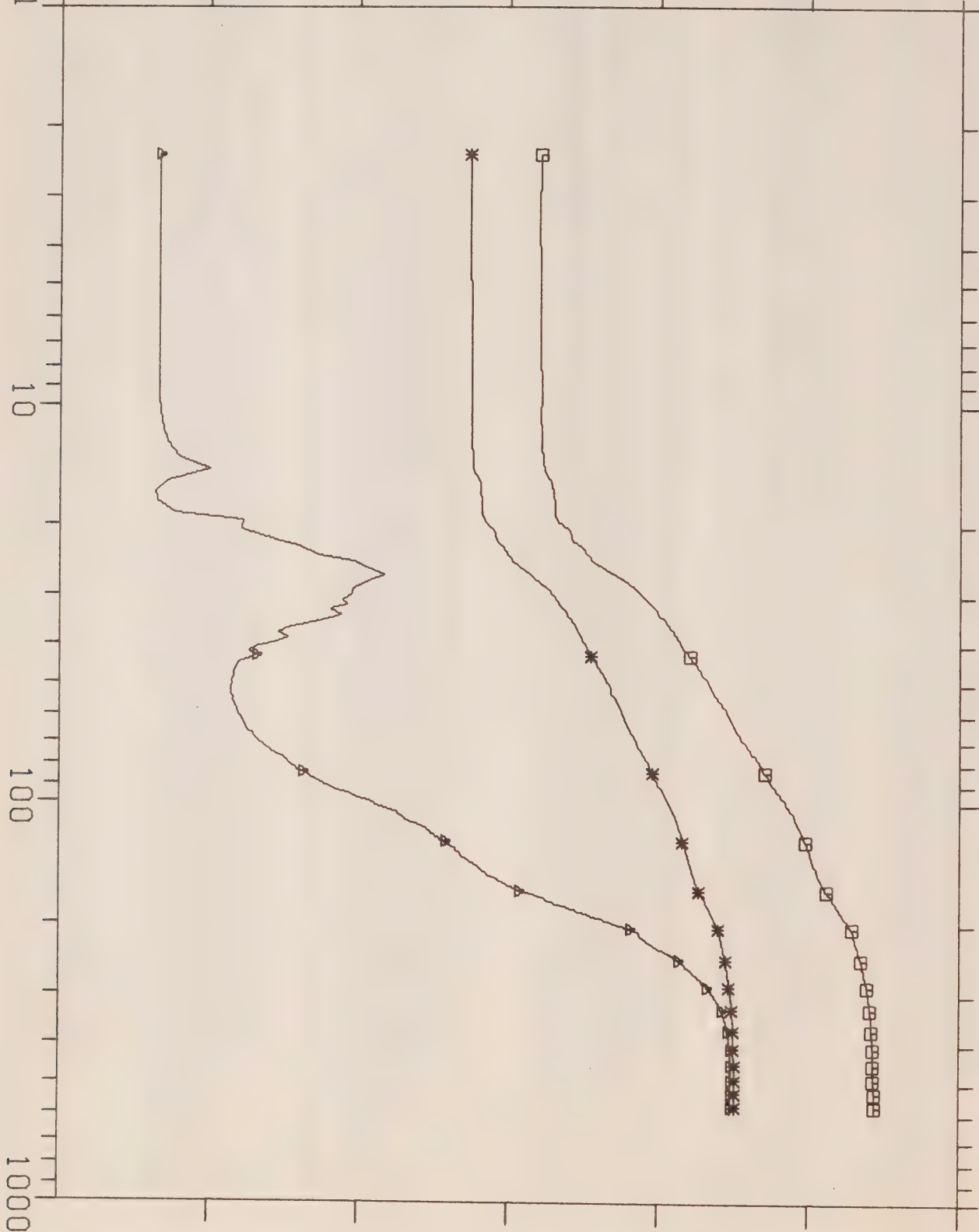
SALINITY 0/00

24.00 26.00 28.00 30.00 32.00 34.00 36.00

SIGMAT

19.00 21.00 23.00 25.00 27.00 29.00 31.00

DEPTH M



CRUISE 15-76-015

GREELEY FIORD-76

EXPER NO. 2024

LAT N.80-26-00

LONG W.82-46-00

WATER DEPTH 620

DEPTH INCR.

DATE 240376

LOCAL TIME 0927

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
2.8	2.35	30.421 E	-1.668 D	24.489	1435.1
3.8	3.50	30.410 E	-1.668 D	24.480	1435.1
4.8	4.50	30.421 E	-1.668 D	24.489	1435.2
5.8	5.35	30.424 E	-1.670 D	24.492	1435.2
6.8	6.55	30.425 E	-1.670 D	24.493	1435.2
7.8	7.60	30.429 E	-1.670 D	24.496	1435.2
8.8	8.60	30.431 E	-1.671 D	24.497	1435.2
9.8	9.55	30.432 E	-1.671 D	24.498	1435.3
10.8	10.45	30.429 E	-1.665 D	24.496	1435.3
11.8	11.60	30.431 E	-1.657 D	24.497	1435.4
12.8	12.40	30.443 E	-1.642 D	24.507	1435.5
13.8	13.60	30.455 E	-1.602 D	24.516	1435.7
14.8	14.55	30.473 E	-1.496 D	24.529	1436.2
15.8	15.55	30.579 E	-1.638 D	24.617	1435.7
16.8	16.55	30.590 E	-1.679 D	24.627	1435.6
17.8	17.50	30.610 E	-1.673 D	24.643	1435.6
18.8	18.70	30.616 E	-1.613 D	24.647	1435.9
19.8	19.50	30.656 E	-1.387 D	24.675	1437.1
20.8	20.60	30.817 E	-1.388 D	24.805	1437.3
21.8	21.75	30.861 E	-1.275 D	24.839	1437.9
22.8	22.55	30.970 E	-1.199 D	24.926	1438.5
23.8	23.70	31.077 E	-1.132 D	25.010	1438.9
24.8	24.55	31.136 E	-1.013 D	25.055	1439.6
25.8	25.70	31.305 E	-0.959 D	25.190	1440.1
26.8	26.55	31.434 E	-0.912 D	25.293	1440.5
27.8	27.70	31.601 E	-0.974 D	25.430	1440.5
28.8	28.65	31.702 E	-1.016 D	25.513	1440.4
29.8	29.70	31.775 E	-1.018 D	25.571	1440.6
30.8	30.70	31.860 E	-1.050 D	25.641	1440.5
31.8	31.75	31.917 E	-1.035 D	25.686	1440.7
32.8	32.50	31.977 E	-1.090 D	25.737	1440.5
33.8	33.55	32.029 E	-1.053 D	25.778	1440.8
34.8	34.30	32.072 E	-1.083 D	25.814	1440.7
35.8	35.20	32.117 E	-1.152 D	25.852	1440.5
36.8	36.20	32.174 E	-1.242 D	25.900	1440.2
37.8	37.40	32.215 E	-1.264 D	25.934	1440.1
38.8	38.30	32.255 E	-1.229 D	25.965	1440.4
39.8	39.35	32.299 E	-1.268 D	26.002	1440.3
40.8	40.45	32.345 E	-1.344 D	26.041	1440.0
41.8	41.35	32.384 E	-1.367 D	26.073	1440.0
42.8	42.30	32.415 E	-1.340 D	26.097	1440.1
43.8	43.40	32.457 E	-1.372 D	26.133	1440.1
44.8	44.30	32.498 E	-1.402 D	26.167	1440.0
45.8	45.55	32.532 E	-1.403 D	26.194	1440.1
46.8	46.45	32.579 E	-1.414 D	26.232	1440.1
47.8	47.50	32.605 E	-1.414 D	26.253	1440.1
48.8	48.45	32.639 E	-1.417 D	26.281	1440.2
49.8	49.40	32.679 E	-1.425 D	26.314	1440.2
50.8	50.45	32.705 E	-1.422 D	26.335	1440.3
51.8	51.40	32.724 E	-1.424 D	26.350	1440.3
52.8	52.65	32.749 E	-1.424 D	26.370	1440.4
53.8	53.55	32.774 E	-1.425 D	26.391	1440.4
54.8	54.55	32.803 E	-1.417 D	26.414	1440.5
55.8	55.60	32.835 E	-1.421 D	26.440	1440.6
56.8	56.40	32.863 E	-1.417 D	26.462	1440.6
57.8	57.60	32.891 E	-1.411 D	26.485	1440.7
58.8	58.50	32.914 E	-1.406 D	26.504	1440.8
59.8	59.70	32.936 E	-1.400 D	26.521	1440.9
60.8	60.60	32.957 E	-1.395 D	26.538	1440.9
61.8	61.65	32.971 E	-1.388 D	26.549	1441.0
62.8	62.60	32.994 E	-1.387 D	26.568	1441.1
63.8	63.55	33.011 E	-1.381 D	26.581	1441.1

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
64.8	64.65	33.035 E	-1.374 D	26.600	1441.2
65.8	65.60	33.056 E	-1.364 D	26.617	1441.3
66.8	66.70	33.080 E	-1.357 D	26.636	1441.4
67.8	67.75	33.103 E	-1.348 D	26.655	1441.5
68.8	68.80	33.126 E	-1.340 D	26.673	1441.6
69.8	69.70	33.150 E	-1.328 D	26.693	1441.7
70.8	70.75	33.171 E	-1.318 D	26.709	1441.8
71.8	71.60	33.194 E	-1.308 D	26.727	1441.9
72.8	72.70	33.216 E	-1.298 D	26.745	1442.0
73.8	73.80	33.241 E	-1.291 D	26.765	1442.1
74.8	74.80	33.265 E	-1.273 D	26.784	1442.2
75.8	75.75	33.292 E	-1.262 D	26.805	1442.3
76.8	76.85	33.310 E	-1.246 D	26.820	1442.4
77.8	77.95	33.333 E	-1.242 D	26.838	1442.5
78.8	78.95	33.353 E	-1.231 D	26.854	1442.6
79.8	79.95	33.372 E	-1.225 D	26.869	1442.6
80.8	80.85	33.390 E	-1.210 D	26.883	1442.8
81.8	81.80	33.409 E	-1.205 D	26.898	1442.8
82.8	82.85	33.427 E	-1.184 D	26.913	1443.0
83.8	84.00	33.446 E	-1.171 D	26.928	1443.1
84.8	84.95	33.460 E	-1.166 D	26.939	1443.1
85.8	85.95	33.474 E	-1.155 D	26.950	1443.2
86.8	86.95	33.489 E	-1.139 D	26.962	1443.3
87.8	87.95	33.506 E	-1.128 D	26.975	1443.4
88.8	89.05	33.521 E	-1.116 D	26.987	1443.5
89.8	90.05	33.541 E	-1.105 D	27.002	1443.6
90.8	91.05	33.558 E	-1.092 D	27.016	1443.7
91.8	92.15	33.579 E	-1.076 D	27.032	1443.8
92.8	93.05	33.603 E	-1.052 D	27.051	1444.0
93.8	94.10	33.623 E	-1.029 D	27.067	1444.2
94.8	95.15	33.644 E	-1.015 D	27.083	1444.3
95.8	96.10	33.660 E	-1.000 D	27.095	1444.4
96.8	97.20	33.675 E	-0.981 D	27.107	1444.5
97.8	98.05	33.690 E	-0.964 D	27.119	1444.6
98.8	99.10	33.705 E	-0.950 D	27.130	1444.7
99.8	100.20	33.723 D	-0.939 C	27.144	1444.8
100.8	101.20	33.731 D	-0.925 C	27.150	1444.9
101.8	102.25	33.745 D	-0.909 C	27.161	1445.0
102.8	103.15	33.762 D	-0.894 C	27.174	1445.1
103.8	104.25	33.777 D	-0.878 C	27.186	1445.2
104.8	105.25	33.791 D	-0.865 C	27.197	1445.3
105.8	106.25	33.803 D	-0.868 C	27.206	1445.4
106.8	107.30	33.813 D	-0.857 C	27.214	1445.4
107.8	108.40	33.825 D	-0.845 C	27.224	1445.5
108.8	109.40	33.836 D	-0.835 C	27.231	1445.6
109.8	110.35	33.847 D	-0.828 C	27.241	1445.7
110.8	111.20	33.854 D	-0.808 C	27.245	1445.8
111.8	112.45	33.863 D	-0.795 C	27.252	1445.9
112.8	113.45	33.876 D	-0.786 C	27.262	1446.0
113.8	114.30	33.885 D	-0.774 C	27.269	1446.0
114.8	115.40	33.894 D	-0.768 C	27.276	1446.1
115.8	116.55	33.903 D	-0.764 C	27.283	1446.1
116.8	117.45	33.913 D	-0.759 C	27.291	1446.2
117.8	118.45	33.918 D	-0.751 C	27.295	1446.3
118.8	119.35	33.925 D	-0.744 C	27.301	1446.3
119.8	120.50	33.932 D	-0.736 C	27.305	1446.4
120.8	121.50	33.942 D	-0.729 C	27.314	1446.4
121.8	122.35	33.952 D	-0.720 C	27.321	1446.5
122.8	123.55	33.960 D	-0.711 C	27.327	1446.6
123.8	124.55	33.970 D	-0.709 C	27.335	1446.6
124.8	125.60	33.974 D	-0.700 C	27.338	1446.7
125.8	126.50	33.986 D	-0.692 C	27.348	1446.8
126.8	127.65	33.997 D	-0.685 C	27.356	1446.8
127.8	128.60	34.001 D	-0.679 C	27.359	1446.9
128.8	129.55	34.007 D	-0.677 C	27.364	1446.9
129.8	130.65	34.012 D	-0.673 C	27.368	1447.0
130.8	131.60	34.014 D	-0.666 C	27.369	1447.0
131.8	132.65	34.020 D	-0.661 C	27.374	1447.1
132.8	133.70	34.027 D	-0.658 C	27.379	1447.1



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
133.8	134.70	34.032 D	-0.653 C	27.383	1447.1
134.8	135.85	34.038 D	-0.649 C	27.388	1447.2
135.8	136.45	34.041 D	-0.643 C	27.390	1447.2
136.8	137.40	34.046 D	-0.637 C	27.394	1447.3
137.8	138.40	34.055 D	-0.629 C	27.401	1447.3
138.8	139.50	34.060 D	-0.620 C	27.405	1447.4
139.8	140.40	34.068 D	-0.615 C	27.411	1447.5
140.8	141.55	34.077 D	-0.613 C	27.418	1447.5
141.8	142.50	34.085 D	-0.606 C	27.424	1447.6
142.8	143.45	34.091 D	-0.598 C	27.429	1447.6
143.8	144.65	34.099 D	-0.594 C	27.435	1447.7
144.8	145.55	34.104 D	-0.589 C	27.439	1447.7
145.8	146.65	34.112 D	-0.586 C	27.445	1447.8
146.8	147.45	34.113 D	-0.582 C	27.445	1447.8
147.8	148.60	34.117 D	-0.574 C	27.449	1447.9
148.8	149.75	34.124 D	-0.569 C	27.454	1447.9
149.8	150.70	34.131 D	-0.558 C	27.460	1448.0
150.8	151.70	34.141 D	-0.554 C	27.467	1448.0
151.8	152.65	34.145 D	-0.547 C	27.470	1448.1
152.8	153.80	34.155 D	-0.537 C	27.478	1448.2
153.8	154.60	34.161 D	-0.535 C	27.483	1448.2
154.8	155.85	34.170 D	-0.531 C	27.490	1448.2
155.8	156.65	34.176 D	-0.522 C	27.494	1448.3
156.8	157.80	34.181 D	-0.511 C	27.498	1448.4
157.8	158.70	34.192 D	-0.503 C	27.506	1448.5
158.8	159.75	34.200 D	-0.493 C	27.513	1448.5
159.8	160.80	34.211 D	-0.490 C	27.521	1448.6
160.8	161.80	34.217 D	-0.478 C	27.525	1448.7
161.8	162.75	34.228 D	-0.472 C	27.534	1448.7
162.8	163.95	34.237 D	-0.466 C	27.541	1448.8
163.8	164.90	34.243 D	-0.453 C	27.545	1448.9
164.8	165.90	34.253 D	-0.439 C	27.553	1449.0
165.8	166.80	34.269 D	-0.426 C	27.565	1449.0
166.8	168.05	34.282 D	-0.414 C	27.575	1449.1
167.8	168.95	34.290 D	-0.405 C	27.581	1449.2
168.8	169.95	34.300 D	-0.395 C	27.589	1449.3
169.8	170.85	34.311 D	-0.387 C	27.597	1449.4
170.8	172.10	34.318 D	-0.379 C	27.603	1449.4
171.8	172.95	34.328 D	-0.373 C	27.611	1449.5
172.8	174.10	34.336 D	-0.364 C	27.617	1449.5
173.8	175.05	34.342 D	-0.356 C	27.621	1449.6
174.8	176.05	34.351 D	-0.348 C	27.628	1449.7
175.8	177.20	34.360 D	-0.340 C	27.635	1449.7
176.8	178.05	34.368 D	-0.329 C	27.640	1449.8
177.8	179.05	34.378 D	-0.321 C	27.648	1449.9
178.8	180.10	34.384 D	-0.308 C	27.653	1450.0
179.8	181.00	34.394 D	-0.300 C	27.660	1450.0
180.8	182.25	34.398 D	-0.292 C	27.663	1450.1
181.8	183.10	34.409 D	-0.282 C	27.672	1450.2
182.8	183.95	34.414 D	-0.273 C	27.676	1450.2
183.8	185.05	34.425 D	-0.265 C	27.684	1450.3
184.8	185.85	34.431 D	-0.257 C	27.688	1450.4
185.8	187.00	34.440 D	-0.250 C	27.695	1450.4
186.8	187.85	34.447 D	-0.240 C	27.700	1450.5
187.8	189.00	34.453 D	-0.230 C	27.705	1450.6
188.8	190.05	34.462 D	-0.223 C	27.712	1450.6
189.8	190.95	34.469 D	-0.213 C	27.717	1450.7
190.8	192.05	34.478 D	-0.205 C	27.723	1450.8
191.8	193.00	34.482 D	-0.192 C	27.727	1450.9
192.8	194.00	34.503 D	-0.184 C	27.743	1450.9
193.8	195.20	34.511 D	-0.174 C	27.749	1451.0
194.8	196.10	34.516 D	-0.166 C	27.752	1451.1
195.8	197.20	34.527 D	-0.154 C	27.761	1451.2
196.8	198.25	34.534 D	-0.147 C	27.766	1451.2
197.8	199.10	34.540 D	-0.141 C	27.771	1451.3
198.8	200.15	34.545 D	-0.132 C	27.774	1451.3
199.8	201.10	34.553 D	-0.123 C	27.780	1451.4
200.8	202.30	34.561 D	-0.112 C	27.786	1451.5
201.8	203.25	34.570 D	-0.104 C	27.793	1451.5

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
202.8	204.20	34.574 D	-0.095 C	27.795	1451.6
203.8	205.30	34.579 D	-0.099 C	27.800	1451.7
204.8	206.20	34.588 D	-0.081 C	27.806	1451.7
205.8	207.20	34.593 D	-0.075 C	27.811	1451.8
206.8	208.30	34.597 D	-0.069 C	27.813	1451.8
207.8	209.20	34.602 D	-0.067 C	27.817	1451.9
208.8	210.40	34.605 D	-0.065 C	27.819	1451.9
209.8	211.35	34.606 D	-0.063 C	27.820	1451.9
210.8	212.30	34.606 D	-0.060 C	27.820	1451.9
211.8	213.30	34.609 D	-0.058 C	27.822	1452.0
212.8	214.45	34.611 D	-0.056 C	27.823	1452.0
213.8	215.50	34.615 D	-0.054 C	27.827	1452.0
214.8	216.50	34.615 D	-0.050 C	27.827	1452.1
215.8	217.30	34.620 D	-0.047 C	27.831	1452.1
216.8	218.45	34.622 D	-0.044 C	27.832	1452.1
217.8	219.55	34.624 D	-0.040 C	27.833	1452.2
218.8	220.40	34.628 D	-0.039 C	27.836	1452.2
219.8	221.40	34.629 D	-0.033 C	27.837	1452.3
220.8	222.65	34.632 D	-0.029 C	27.839	1452.3
221.8	223.50	34.637 D	-0.027 C	27.843	1452.3
222.8	224.55	34.639 D	-0.020 C	27.845	1452.4
223.8	225.55	34.645 D	-0.015 C	27.849	1452.4
224.8	226.70	34.651 D	-0.010 C	27.854	1452.5
225.8	227.50	34.651 D	-0.004 C	27.853	1452.5
226.8	228.65	34.659 D	-0.003 C	27.860	1452.6
227.8	229.70	34.661 D	0.002 C	27.861	1452.6
228.8	230.55	34.662 D	0.009 C	27.861	1452.6
229.8	231.75	34.662 D	0.017 C	27.861	1452.7
230.8	232.80	34.665 D	0.021 C	27.863	1452.7
231.8	233.70	34.665 D	0.028 C	27.863	1452.8
232.8	234.70	34.670 D	0.032 C	27.867	1452.8
233.8	235.70	34.674 D	0.034 C	27.870	1452.9
234.8	236.65	34.676 D	0.038 C	27.872	1452.9
235.8	237.80	34.683 D	0.042 C	27.876	1452.9
236.8	238.65	34.683 D	0.049 C	27.876	1453.0
237.8	239.90	34.687 D	0.051 C	27.879	1453.0
238.8	240.80	34.691 D	0.053 C	27.883	1453.1
239.8	241.75	34.694 D	0.059 C	27.885	1453.1
240.8	242.90	34.694 D	0.062 C	27.885	1453.1
241.8	244.00	34.699 D	0.063 C	27.889	1453.2
242.8	244.85	34.701 D	0.066 C	27.890	1453.2
243.8	245.90	34.702 D	0.070 C	27.890	1453.2
244.8	246.90	34.706 D	0.072 C	27.894	1453.3
245.8	247.95	34.706 D	0.076 C	27.894	1453.3
246.8	248.90	34.711 D	0.078 C	27.897	1453.3
247.8	249.75	34.712 D	0.080 C	27.898	1453.4
248.8	250.60	34.713 D	0.083 C	27.899	1453.4
249.8	251.85	34.718 D	0.084 C	27.903	1453.4
250.8	252.80	34.717 D	0.089 C	27.902	1453.4
251.8	253.70	34.721 D	0.090 C	27.905	1453.5
252.8	254.90	34.724 D	0.092 C	27.907	1453.5
253.8	255.85	34.725 D	0.096 C	27.908	1453.5
254.8	256.70	34.728 D	0.093 C	27.910	1453.6
255.8	257.85	34.729 D	0.100 C	27.911	1453.6
256.8	258.85	34.731 D	0.103 C	27.912	1453.6
257.8	259.90	34.731 D	0.106 C	27.912	1453.7
258.8	260.95	34.734 D	0.108 C	27.914	1453.7
259.8	261.75	34.735 D	0.109 C	27.915	1453.7
260.8	263.30	34.739 D	0.113 C	27.919	1453.8
261.8	264.50	34.742 D	0.115 C	27.921	1453.8
262.8	265.50	34.745 D	0.117 C	27.923	1453.8
263.8	266.35	34.744 D	0.122 C	27.922	1453.9
264.8	267.55	34.746 D	0.124 C	27.923	1453.9
265.8	268.65	34.750 D	0.125 C	27.926	1453.9
266.8	269.45	34.751 D	0.128 C	27.928	1453.9
267.8	270.40	34.752 D	0.132 C	27.928	1454.0
268.8	271.75	34.757 D	0.132 C	27.932	1454.0
269.8	272.60	34.758 D	0.136 C	27.932	1454.0
270.8	273.65	34.758 D	0.139 C	27.932	1454.1



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
271.8	274.55	34.762 D	0.139 C	27.935	1454.1
272.8	275.75	34.764 D	0.141 C	27.937	1454.1
273.8	276.60	34.763 D	0.145 C	27.936	1454.2
274.8	277.60	34.768 D	0.147 C	27.940	1454.2
275.8	278.80	34.770 D	0.148 C	27.942	1454.2
276.8	279.60	34.771 D	0.151 C	27.942	1454.2
277.8	280.65	34.773 D	0.153 C	27.944	1454.3
278.8	281.80	34.776 D	0.154 C	27.946	1454.3
279.8	282.70	34.774 D	0.158 C	27.944	1454.3
280.8	283.70	34.779 D	0.158 C	27.948	1454.4
281.8	284.85	34.777 D	0.161 C	27.947	1454.4
282.8	285.80	34.781 D	0.162 C	27.950	1454.4
283.8	286.75	34.781 D	0.164 C	27.950	1454.4
284.8	287.85	34.785 D	0.165 C	27.953	1454.5
285.8	288.90	34.786 D	0.166 C	27.954	1454.5
286.8	289.85	34.787 D	0.169 C	27.954	1454.5
287.8	290.90	34.788 D	0.171 C	27.955	1454.5
288.8	291.75	34.788 D	0.173 C	27.955	1454.6
289.8	292.90	34.792 D	0.174 C	27.958	1454.6
290.8	293.85	34.793 D	0.175 C	27.959	1454.6
291.8	294.85	34.794 D	0.176 C	27.960	1454.6
292.8	296.00	34.794 D	0.178 C	27.959	1454.7
293.8	296.85	34.795 D	0.179 C	27.960	1454.7
294.8	298.00	34.797 D	0.181 C	27.961	1454.7
295.8	299.00	34.797 D	0.183 C	27.961	1454.7
296.8	300.15	34.799 D	0.183 C	27.963	1454.8
297.8	301.00	34.801 D	0.184 C	27.965	1454.8
298.8	301.95	34.800 D	0.187 C	27.964	1454.8
299.8	303.15	34.804 D	0.187 C	27.967	1454.8
300.8	304.05	34.804 D	0.189 C	27.967	1454.9
301.8	305.10	34.805 D	0.190 C	27.967	1454.9
302.8	306.05	34.806 D	0.192 C	27.968	1454.9
303.8	307.20	34.809 D	0.192 C	27.970	1454.9
304.8	308.25	34.807 D	0.194 C	27.969	1455.0
305.8	309.25	34.810 D	0.195 C	27.971	1455.0
306.8	310.20	34.812 D	0.195 C	27.973	1455.0
307.8	311.35	34.812 D	0.197 C	27.973	1455.0
308.8	312.30	34.813 D	0.198 C	27.973	1455.1
309.8	313.15	34.814 D	0.198 C	27.974	1455.1
310.8	314.30	34.814 D	0.200 C	27.974	1455.1
311.8	315.25	34.814 D	0.201 C	27.974	1455.1
312.8	316.40	34.816 D	0.201 C	27.975	1455.1
313.8	317.25	34.816 D	0.203 C	27.975	1455.2
314.8	318.50	34.820 D	0.202 C	27.979	1455.2
315.8	319.25	34.818 D	0.205 C	27.977	1455.2
316.8	320.50	34.819 D	0.205 C	27.978	1455.2
317.8	321.35	34.820 D	0.205 C	27.978	1455.2
318.8	322.40	34.821 D	0.207 C	27.979	1455.3
319.8	323.45	34.823 D	0.207 C	27.981	1455.3
320.8	324.40	34.822 D	0.209 C	27.980	1455.3
321.8	325.45	34.823 D	0.209 C	27.981	1455.3
322.8	326.35	34.824 D	0.210 C	27.981	1455.4
323.8	327.50	34.827 D	0.210 C	27.984	1455.4
324.8	328.55	34.826 D	0.211 C	27.983	1455.4
325.8	329.55	34.827 D	0.212 C	27.984	1455.4
326.8	330.60	34.826 D	0.213 C	27.983	1455.4
327.8	331.65	34.829 D	0.213 C	27.985	1455.5
328.8	332.65	34.828 D	0.214 C	27.985	1455.5
329.8	333.50	34.830 D	0.215 C	27.986	1455.5
330.8	334.60	34.832 D	0.215 C	27.988	1455.5
331.8	335.60	34.830 D	0.217 C	27.986	1455.5
332.8	336.65	34.830 D	0.218 C	27.986	1455.6
333.8	337.65	34.831 D	0.218 C	27.987	1455.6
334.8	338.65	34.833 D	0.218 C	27.988	1455.6
335.8	339.70	34.833 D	0.219 C	27.988	1455.6
336.8	340.75	34.834 D	0.219 C	27.989	1455.6
337.8	341.55	34.833 D	0.220 C	27.989	1455.7
338.8	342.85	34.834 D	0.221 C	27.939	1455.7
339.8	343.75	34.835 D	0.221 C	27.990	1455.7



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
340.8	344.80	34.837 D	0.221 C	27.992	1455.7
341.8	345.75	34.836 D	0.222 C	27.990	1455.7
342.8	346.80	34.835 D	0.223 C	27.990	1455.8
343.8	347.80	34.838 D	0.223 C	27.992	1455.8
344.8	348.85	34.835 D	0.225 C	27.989	1455.8
345.8	349.85	34.838 D	0.224 C	27.992	1455.8
346.8	350.70	34.838 D	0.225 C	27.992	1455.8
347.8	351.90	34.840 D	0.225 C	27.994	1455.9
348.8	352.90	34.840 D	0.225 C	27.993	1455.9
349.8	353.80	34.842 D	0.225 C	27.995	1455.9
350.8	354.85	34.839 D	0.227 C	27.993	1455.9
351.8	356.00	34.841 D	0.226 C	27.994	1455.9
352.8	356.90	34.841 D	0.227 C	27.994	1456.0
353.8	357.90	34.840 D	0.228 C	27.994	1456.0
354.8	359.10	34.845 D	0.226 C	27.997	1456.0
355.8	360.00	34.843 D	0.227 C	27.996	1456.0
356.8	361.05	34.842 D	0.229 C	27.995	1456.0
357.8	362.00	34.844 D	0.228 C	27.996	1456.1
358.8	363.20	34.843 D	0.229 C	27.996	1456.1
359.8	363.95	34.844 D	0.229 C	27.997	1456.1
360.8	365.20	34.845 D	0.229 C	27.997	1456.1
361.8	366.15	34.843 D	0.231 C	27.996	1456.1
362.8	367.00	34.845 D	0.230 C	27.998	1456.1
363.8	368.10	34.846 D	0.231 C	27.999	1456.2
364.8	369.15	34.846 D	0.231 C	27.998	1456.2
365.8	370.20	34.844 D	0.232 C	27.997	1456.2
366.8	371.20	34.848 D	0.231 C	27.999	1456.2
367.8	372.10	34.847 D	0.232 C	27.999	1456.2
368.8	373.30	34.849 D	0.231 C	28.001	1456.3
369.8	374.20	34.846 D	0.233 C	27.998	1456.3
370.8	375.40	34.848 D	0.232 C	28.000	1456.3
371.8	376.30	34.850 D	0.232 C	28.002	1456.3
372.8	377.30	34.849 D	0.233 C	28.000	1456.3
373.8	378.40	34.848 D	0.233 C	28.000	1456.3
374.8	379.40	34.849 D	0.234 C	28.001	1456.4
375.8	380.35	34.851 D	0.233 C	28.002	1456.4
376.8	381.40	34.850 D	0.234 C	28.001	1456.4
377.8	382.40	34.851 D	0.233 C	28.002	1456.4
378.8	383.40	34.850 D	0.235 C	28.001	1456.4
379.8	384.45	34.851 D	0.235 C	28.002	1456.5
380.8	385.35	34.852 D	0.235 C	28.003	1456.5
381.8	386.35	34.851 D	0.235 C	28.002	1456.5
382.8	387.35	34.851 D	0.236 C	28.002	1456.5
383.8	388.40	34.854 D	0.235 C	28.005	1456.5
384.8	389.45	34.852 D	0.236 C	28.003	1456.6
385.8	390.50	34.853 D	0.236 C	28.004	1456.6
386.8	391.55	34.853 D	0.237 C	28.003	1456.6
387.8	392.65	34.852 D	0.237 C	28.003	1456.6
388.8	393.65	34.854 D	0.236 C	28.005	1456.6
389.8	394.65	34.854 D	0.237 C	28.004	1456.6
390.8	395.65	34.855 D	0.237 C	28.005	1456.7
391.8	396.65	34.854 D	0.237 C	28.004	1456.7
392.8	397.60	34.854 D	0.238 C	28.004	1456.7
393.8	398.60	34.856 D	0.237 C	28.005	1456.7
394.8	399.50	34.855 D	0.237 C	28.005	1456.7
395.8	400.60	34.855 D	0.238 C	28.005	1456.7
396.8	401.60	34.856 D	0.238 C	28.006	1456.8
397.8	402.55	34.857 D	0.238 C	28.006	1456.8
398.8	403.60	34.858 D	0.238 C	28.007	1456.8
399.8	404.60	34.855 D	0.240 C	28.005	1456.8
400.8	405.65	34.857 D	0.239 C	28.006	1456.8
401.8	406.90	34.857 D	0.238 C	28.007	1456.9
402.8	407.80	34.857 D	0.239 C	28.006	1456.9
403.8	408.85	34.858 D	0.239 C	28.007	1456.9
404.8	409.90	34.858 D	0.239 C	28.008	1456.9
405.8	410.80	34.858 D	0.240 C	28.008	1456.9
406.8	411.90	34.859 D	0.239 C	28.008	1456.9
407.8	412.70	34.857 D	0.241 C	28.007	1457.0
408.8	413.95	34.860 D	0.239 C	28.009	1457.0

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
409.8	414.85	34.859 D	0.240 C	28.008	1457.0
410.8	415.90	34.859 D	0.240 C	28.009	1457.0
411.8	416.95	34.860 D	0.240 C	28.009	1457.0
412.8	417.95	34.859 D	0.241 C	28.008	1457.0
413.8	419.10	34.859 D	0.241 C	28.008	1457.1
414.8	420.10	34.860 D	0.240 C	28.009	1457.1
415.8	421.15	34.861 D	0.240 C	28.009	1457.1
416.8	422.05	34.860 D	0.241 C	28.009	1457.1
417.8	423.05	34.860 D	0.241 C	28.009	1457.1
418.8	424.10	34.861 D	0.241 C	28.009	1457.2
419.8	425.00	34.860 D	0.241 C	28.009	1457.2
420.8	425.95	34.860 D	0.242 C	28.009	1457.2
421.8	427.10	34.861 D	0.242 C	28.009	1457.2
422.8	428.20	34.860 D	0.242 C	28.009	1457.2
423.8	429.20	34.862 D	0.241 C	28.010	1457.2
424.8	430.00	34.861 D	0.241 C	28.010	1457.3
425.8	431.30	34.862 D	0.241 C	28.011	1457.3
426.8	432.10	34.862 D	0.241 C	28.010	1457.3
427.8	433.20	34.860 D	0.243 C	28.009	1457.3
428.8	434.20	34.863 D	0.241 C	28.012	1457.3
429.8	435.20	34.863 D	0.242 C	28.011	1457.3
430.8	436.30	34.865 D	0.241 C	28.013	1457.4
431.8	437.35	34.863 D	0.242 C	28.011	1457.4
432.8	438.25	34.863 D	0.242 C	28.011	1457.4
433.8	439.45	34.864 D	0.241 C	28.012	1457.4
434.8	440.30	34.861 D	0.242 C	28.010	1457.4
435.8	441.35	34.864 D	0.242 C	28.012	1457.4
436.8	442.35	34.864 D	0.242 C	28.012	1457.5
437.8	443.30	34.865 D	0.242 C	28.013	1457.5
438.8	444.45	34.865 D	0.242 C	28.013	1457.5
439.8	445.35	34.866 D	0.242 C	28.013	1457.5
440.8	446.35	34.865 D	0.242 C	28.013	1457.5
441.8	447.45	34.866 D	0.242 C	28.013	1457.5
442.8	448.35	34.865 D	0.242 C	28.013	1457.6
443.8	449.60	34.867 D	0.241 C	28.015	1457.6
444.8	450.55	34.864 D	0.243 C	28.012	1457.6
445.8	451.50	34.865 D	0.243 C	28.013	1457.6
446.8	452.60	34.864 D	0.243 C	28.012	1457.6
447.8	453.50	34.865 D	0.243 C	28.013	1457.7
448.8	454.60	34.867 D	0.242 C	28.015	1457.7
449.8	455.60	34.867 D	0.242 C	28.014	1457.7
450.8	456.70	34.866 D	0.242 C	28.014	1457.7
451.8	457.65	34.868 D	0.241 C	28.015	1457.7
452.8	458.55	34.865 D	0.243 C	28.013	1457.7
453.8	459.70	34.867 D	0.242 C	28.015	1457.8
454.8	460.65	34.867 D	0.242 C	28.014	1457.8
455.8	461.55	34.866 D	0.243 C	28.014	1457.8
456.8	462.65	34.866 D	0.243 C	28.013	1457.8
457.8	463.80	34.868 D	0.242 C	28.015	1457.8
458.8	464.80	34.866 D	0.243 C	28.013	1457.8
459.8	465.90	34.868 D	0.242 C	28.015	1457.9
460.8	466.80	34.869 D	0.242 C	28.016	1457.9
461.8	467.75	34.869 D	0.242 C	28.016	1457.9
462.8	468.90	34.868 D	0.243 C	28.015	1457.9
463.8	469.85	34.868 D	0.242 C	28.015	1457.9
464.8	470.85	34.867 D	0.243 C	28.014	1457.9
465.8	471.85	34.867 D	0.243 C	28.015	1458.0
466.8	472.80	34.869 D	0.242 C	28.016	1458.0
467.8	473.85	34.867 D	0.244 C	28.014	1458.0
468.8	474.95	34.868 D	0.243 C	28.016	1458.0
469.8	475.85	34.870 D	0.242 C	28.017	1458.0
470.8	476.80	34.869 D	0.243 C	28.016	1458.0
471.8	478.05	34.868 D	0.243 C	28.015	1458.1
472.8	479.00	34.867 D	0.243 C	28.015	1458.1
473.8	479.95	34.869 D	0.242 C	28.016	1458.1
474.8	481.05	34.869 D	0.242 C	28.016	1458.1
475.8	481.95	34.870 D	0.242 C	28.017	1458.1
476.8	482.90	34.868 D	0.243 C	28.015	1458.1
477.8	483.95	34.869 D	0.243 C	28.016	1458.2



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
478.8	485.10	34.868 D	0.243 C	28.015	1458.2
479.8	486.20	34.870 D	0.242 C	28.017	1458.2
480.8	487.20	34.871 D	0.242 C	28.018	1458.2
481.8	488.10	34.869 D	0.243 C	28.016	1458.2
482.8	489.30	34.870 D	0.242 C	28.017	1458.2
483.8	490.10	34.871 D	0.242 C	28.017	1458.3
484.8	491.25	34.870 D	0.242 C	28.017	1458.3
485.8	492.10	34.869 D	0.244 C	28.016	1458.3
486.8	493.10	34.868 D	0.244 C	28.015	1458.3
487.8	494.35	34.870 D	0.243 C	28.017	1458.3
488.8	495.25	34.870 D	0.242 C	28.017	1458.3
489.8	496.15	34.869 D	0.243 C	28.016	1458.4
490.8	497.20	34.872 D	0.242 C	28.019	1458.4
491.8	498.20	34.870 D	0.243 C	28.017	1458.4
492.8	499.40	34.873 D	0.241 C	28.020	1458.4
493.8	500.40	34.871 D	0.243 C	28.017	1458.4
494.8	501.30	34.870 D	0.243 C	28.017	1458.4
495.8	502.35	34.871 D	0.243 C	28.018	1458.5
496.8	503.30	34.873 D	0.242 C	28.019	1458.5
497.8	504.45	34.872 D	0.242 C	28.019	1458.5
498.8	505.40	34.873 D	0.242 C	28.019	1458.5
499.8	506.45	34.871 D	0.242 C	28.018	1458.5
500.8	507.45	34.873 D	0.242 C	28.020	1458.5
501.8	508.50	34.873 D	0.242 C	28.019	1458.6
502.8	509.35	34.873 D	0.241 C	28.020	1458.6
503.8	510.55	34.871 D	0.242 C	28.018	1458.6
504.8	511.40	34.871 D	0.242 C	28.018	1458.6
505.8	512.50	34.872 D	0.242 C	28.018	1458.6
506.8	513.55	34.873 D	0.242 C	28.019	1458.6
507.8	514.50	34.872 D	0.242 C	28.019	1458.7
508.8	515.65	34.873 D	0.242 C	28.019	1458.7
509.8	516.45	34.872 D	0.242 C	28.019	1458.7
510.8	517.60	34.873 D	0.242 C	28.019	1458.7
511.8	518.65	34.874 D	0.241 C	28.020	1458.7
512.8	519.65	34.873 D	0.241 C	28.019	1458.7
513.8	520.70	34.874 D	0.241 C	28.020	1458.8
514.8	521.65	34.873 D	0.242 C	28.020	1458.8
515.8	522.70	34.874 D	0.241 C	28.020	1458.8
516.8	523.70	34.875 D	0.241 C	28.021	1458.8
517.8	524.65	34.873 D	0.242 C	28.019	1458.8
518.8	525.65	34.874 D	0.241 C	28.020	1458.8
519.8	526.85	34.873 D	0.242 C	28.020	1458.9
520.8	527.85	34.873 D	0.242 C	28.019	1458.9
521.8	528.70	34.873 D	0.241 C	28.020	1458.9
522.8	529.80	34.874 D	0.241 C	28.020	1458.9
523.8	530.80	34.872 D	0.242 C	28.019	1458.9
524.8	531.85	34.873 D	0.241 C	28.019	1458.9
525.8	532.70	34.874 D	0.241 C	28.020	1459.0
526.8	533.85	34.873 D	0.242 C	28.020	1459.0
527.8	534.95	34.874 D	0.241 C	28.020	1459.0
528.8	536.05	34.875 D	0.241 C	28.021	1459.0
529.8	536.90	34.873 D	0.242 C	28.019	1459.0
530.8	537.90	34.871 D	0.242 C	28.018	1459.0
531.8	538.95	34.874 D	0.240 C	28.020	1459.1
532.8	539.95	34.875 D	0.240 C	28.021	1459.1
533.8	541.05	34.876 D	0.240 C	28.022	1459.1
534.8	542.10	34.875 D	0.240 C	28.021	1459.1
535.8	543.00	34.875 D	0.241 C	28.021	1459.1
536.8	543.95	34.876 D	0.240 C	28.021	1459.1
537.8	545.10	34.873 D	0.242 C	28.019	1459.2
538.8	546.10	34.875 D	0.241 C	28.021	1459.2
539.8	547.10	34.874 D	0.241 C	28.020	1459.2
540.8	548.05	34.873 D	0.241 C	28.020	1459.2
541.8	549.10	34.873 D	0.242 C	28.019	1459.2
542.8	550.15	34.875 D	0.240 C	28.021	1459.2
543.8	551.00	34.875 D	0.241 C	28.021	1459.3
544.8	552.10	34.876 D	0.240 C	28.022	1459.3
545.8	553.20	34.875 D	0.241 C	28.021	1459.3
546.8	554.10	34.873 D	0.242 C	28.019	1459.3



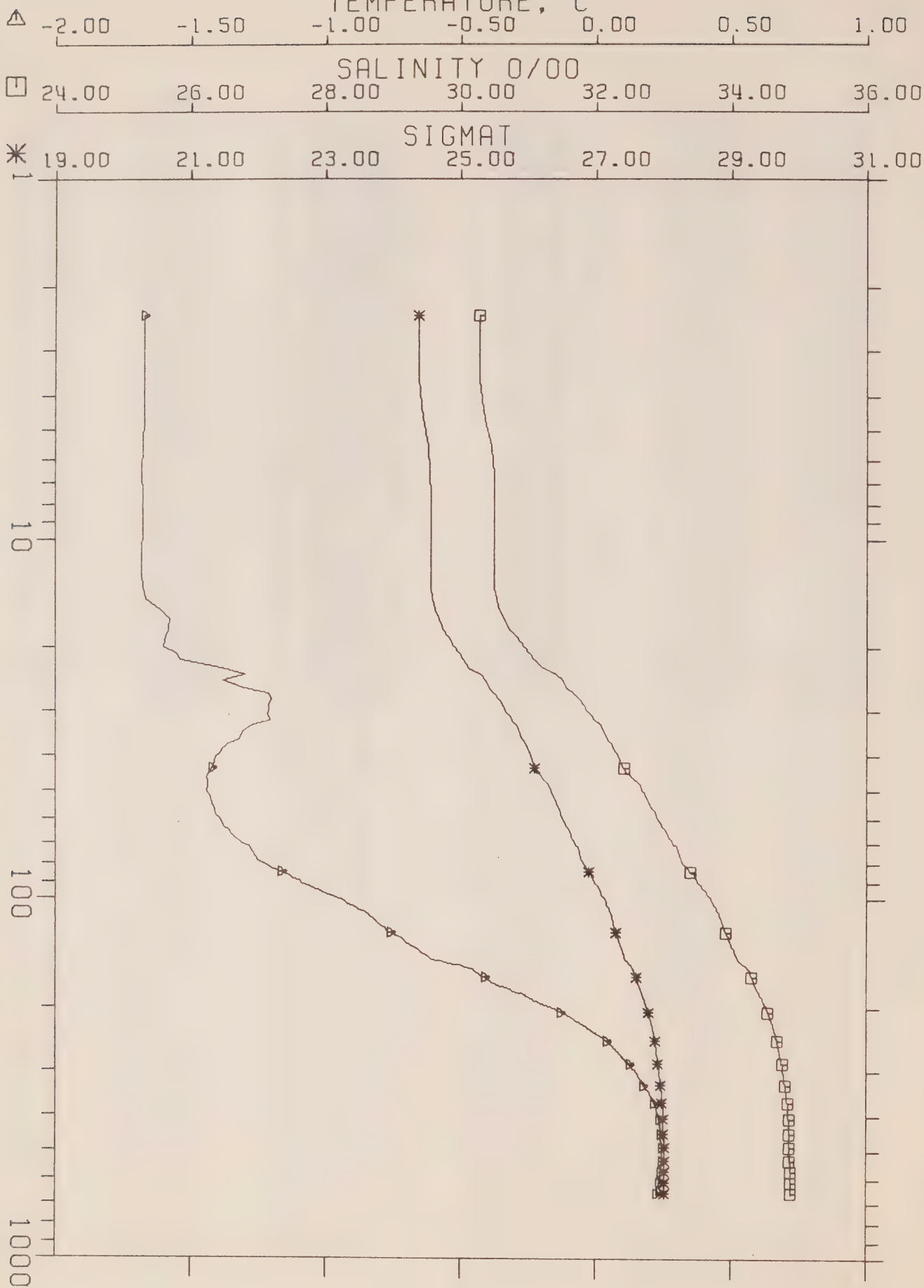
DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
547.8	555.20	34.874 D	0.241 C	28.020	1459.3
548.8	556.20	34.874 D	0.241 C	28.020	1459.3
549.8	557.15	34.875 D	0.240 C	28.021	1459.4
550.8	558.25	34.874 D	0.240 C	28.020	1459.4
551.8	559.30	34.875 D	0.240 C	28.021	1459.4
552.8	560.25	34.875 D	0.240 C	28.021	1459.4
553.8	561.35	34.875 D	0.240 C	28.021	1459.4
554.8	562.45	34.875 D	0.240 C	28.021	1459.4
555.8	563.45	34.875 D	0.239 C	28.021	1459.5
556.8	564.50	34.876 D	0.240 C	28.022	1459.5
557.8	565.35	34.876 D	0.240 C	28.022	1459.5
558.8	566.30	34.874 D	0.241 C	28.020	1459.5
559.8	567.30	34.876 D	0.240 C	28.022	1459.5
560.8	568.30	34.876 D	0.240 C	28.021	1459.5
561.8	569.40	34.876 D	0.240 C	28.022	1459.6
562.8	570.50	34.876 D	0.240 C	28.022	1459.6
563.8	571.60	34.874 D	0.241 C	28.020	1459.6
564.8	572.40	34.876 D	0.240 C	28.022	1459.6
565.8	573.60	34.875 D	0.240 C	28.021	1459.6
566.8	574.50	34.877 D	0.239 C	28.023	1459.6
567.8	575.60	34.876 D	0.240 C	28.021	1459.7
568.8	576.65	34.876 D	0.239 C	28.022	1459.7
569.8	577.60	34.876 D	0.240 C	28.022	1459.7
570.8	578.65	34.878 D	0.239 C	28.023	1459.7
571.8	579.60	34.876 D	0.240 C	28.022	1459.7
572.8	580.50	34.874 D	0.241 C	28.021	1459.7
573.8	581.70	34.876 D	0.240 C	28.022	1459.8
574.8	582.75	34.876 D	0.240 C	28.022	1459.8
575.8	583.80	34.876 D	0.239 C	28.022	1459.8
576.8	584.70	34.877 D	0.240 C	28.023	1459.8
577.8	585.70	34.876 D	0.239 C	28.022	1459.8
578.8	586.85	34.876 D	0.240 C	28.022	1459.8
579.8	587.80	34.877 D	0.240 C	28.023	1459.9
580.8	588.90	34.877 D	0.239 C	28.023	1459.9

TEMPERATURE, C

SALINITY 0/00

SIGMAT

DEPTH M



CRUISE 15-76-015

GREELY FIORD-76

EXPER NO. 2025

LAT N.80-29-00

LONG W.84-24-00

WATER DEPTH 696

DEPTH INCR.

DATE 240376

LOCAL TIME 2020

DEPTH	PRES	SAL	TEMP	SIGMAT	SJUND
2.8	2.40	30.275 E	-1.668 D	24.371	1434.9
3.8	3.60	30.278 E	-1.669 D	24.374	1435.0
4.8	4.60		-1.672 D		
5.8	5.55	30.460 E	-1.677 D	24.521	1435.2
6.8	6.55	30.490 E	-1.678 D	24.546	1435.3
7.8	7.60	30.498 E	-1.677 D	24.552	1435.3
8.8	8.60	30.500 E	-1.677 D	24.554	1435.3
9.8	9.75	30.501 E	-1.676 D	24.555	1435.3
10.8	10.65	30.503 E	-1.678 D	24.556	1435.3
11.8	11.50	30.505 E	-1.678 D	24.558	1435.4
12.8	12.70	30.506 E	-1.679 D	24.558	1435.4
13.8	13.55	30.506 E	-1.677 D	24.558	1435.4
14.8	14.65	30.537 E	-1.663 D	24.583	1435.5
15.8	15.70	30.586 E	-1.608 D	24.622	1435.9
16.8	16.65	30.667 E	-1.574 D	24.687	1436.2
17.8	17.90	30.740 E	-1.579 D	24.747	1436.3
18.8	18.65	30.841 E	-1.589 D	24.829	1436.4
19.8	19.80	30.932 E	-1.600 D	24.902	1436.5
20.8	20.75	31.017 E	-1.557 D	24.971	1436.8
21.8	21.70	31.101 E	-1.536 D	25.038	1437.0
22.8	22.75	31.214 E	-1.385 D	25.126	1437.9
23.8	23.70	31.421 E	-1.293 D	25.293	1438.7
24.8	24.70	31.514 E	-1.379 D	25.369	1438.4
25.8	25.85	31.588 E	-1.300 D	25.428	1438.9
26.8	26.80	31.684 E	-1.212 D	25.503	1439.5
27.8	28.00	31.776 E	-1.199 D	25.577	1439.7
28.8	28.90	31.835 E	-1.208 D	25.625	1439.7
29.8	30.00	31.885 E	-1.212 D	25.666	1439.8
30.8	30.90	31.946 E	-1.216 D	25.715	1439.9
31.8	31.80	32.001 E	-1.205 D	25.759	1440.0
32.8	32.80	32.074 E	-1.272 D	25.820	1439.8
33.8	33.90	32.121 E	-1.300 D	25.859	1439.8
34.8	35.00	32.158 E	-1.313 D	25.889	1439.8
35.8	36.00	32.189 E	-1.322 D	25.914	1439.8
36.8	36.90	32.233 E	-1.358 D	25.951	1439.7
37.8	37.85	32.268 E	-1.373 D	25.979	1439.7
38.8	39.10	32.316 E	-1.389 D	26.019	1439.7
39.8	39.95	32.341 E	-1.400 D	26.039	1439.7
40.8	41.05	32.368 E	-1.408 D	26.061	1439.7
41.8	42.15	32.385 E	-1.412 D	26.075	1439.8
42.8	43.10	32.416 E	-1.419 D	26.100	1439.8
43.8	44.10	32.441 E	-1.424 D	26.121	1439.8
44.8	45.00	32.509 E	-1.434 D	26.176	1439.9
45.8	46.05	32.566 E	-1.438 D	26.222	1440.0
46.8	47.05	32.617 E	-1.437 D	26.264	1440.0
47.8	48.05	32.651 E	-1.436 D	26.291	1440.1
48.8	49.05	32.675 E	-1.437 D	26.311	1440.2
49.8	50.10	32.709 E	-1.439 D	26.338	1440.2
50.8	51.20	32.735 E	-1.428 D	26.359	1440.3
51.8	52.15	32.758 E	-1.426 D	26.378	1440.4
52.8	53.05	32.779 E	-1.426 D	26.394	1440.4
53.8	54.10	32.807 E	-1.422 D	26.418	1440.5
54.8	55.20	32.828 E	-1.416 D	26.434	1440.6
55.8	56.20	32.852 E	-1.411 D	26.453	1440.7
56.8	57.10	32.879 E	-1.409 D	26.475	1440.7
57.8	58.20	32.895 E	-1.406 D	26.488	1440.8
58.8	59.35	32.914 E	-1.394 D	26.503	1440.9
59.8	60.20	32.938 E	-1.390 D	26.523	1440.9
60.8	61.20	32.957 E	-1.387 D	26.538	1441.0
61.8	62.35	32.987 E	-1.379 D	26.562	1441.1
62.8	63.30	33.009 E	-1.374 D	26.580	1441.2
63.8	64.25	33.044 E	-1.358 D	26.607	1441.3



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
64.8	65.40	33.058 E	-1.353 D	26.619	1441.4
65.8	66.35	33.074 E	-1.346 D	26.631	1441.4
66.8	67.40	33.096 E	-1.337 D	26.649	1441.5
67.8	68.45	33.113 E	-1.327 D	26.663	1441.6
68.8	69.45	33.131 E	-1.317 D	26.677	1441.7
69.8	70.50	33.166 E	-1.301 D	26.705	1441.8
70.8	71.50	33.204 E	-1.283 D	26.735	1442.0
71.8	72.50	33.219 E	-1.280 D	26.747	1442.1
72.8	73.60	33.227 E	-1.274 D	26.753	1442.1
73.8	74.50	33.239 E	-1.271 D	26.763	1442.2
74.8	75.55	33.244 E	-1.263 D	26.767	1442.2
75.8	76.60	33.252 E	-1.260 D	26.773	1442.3
76.8	77.60	33.261 E	-1.254 D	26.781	1442.3
77.8	78.60	33.274 E	-1.246 D	26.790	1442.4
78.8	79.55	33.303 E	-1.228 D	26.814	1442.5
79.8	80.60	33.329 E	-1.217 D	26.834	1442.6
80.8	81.65	33.356 E	-1.205 D	26.856	1442.7
81.8	82.75	33.383 E	-1.184 D	26.877	1442.9
82.8	83.55	33.404 E	-1.166 D	26.893	1443.0
83.8	84.55	33.430 E	-1.158 D	26.914	1443.1
84.8	85.65	33.452 E	-1.139 D	26.932	1443.3
85.8	86.65	33.472 E	-1.131 D	26.947	1443.3
86.8	87.70	33.484 E	-1.123 D	26.957	1443.4
87.8	88.65	33.496 E	-1.100 D	26.966	1443.6
88.8	89.75	33.519 E	-1.097 D	26.984	1443.6
89.8	90.75	33.545 E	-1.087 D	27.005	1443.7
90.8	91.80	33.565 E	-1.066 D	27.021	1443.9
91.8	92.75	33.584 E	-1.049 D	27.035	1444.0
92.8	93.70	33.604 E	-1.032 D	27.051	1444.1
93.8	94.90	33.617 E	-1.022 D	27.061	1444.2
94.8	95.90	33.634 E	-1.012 D	27.075	1444.3
95.8	96.75	33.652 E	-0.988 D	27.088	1444.4
96.8	97.75	33.677 E	-0.973 D	27.108	1444.5
97.8	98.95	33.691 E	-0.961 D	27.119	1444.6
98.8	100.05	33.709 D	-0.948 C	27.133	1444.7
99.8	100.75	33.724 D	-0.934 C	27.145	1444.8
100.8	101.95	33.734 D	-0.924 C	27.152	1444.9
101.8	102.90	33.745 D	-0.915 C	27.161	1445.0
102.8	104.00	33.756 D	-0.903 C	27.169	1445.1
103.8	105.00	33.775 D	-0.888 C	27.184	1445.2
104.8	105.95	33.786 D	-0.884 C	27.193	1445.3
105.8	107.05	33.790 D	-0.879 C	27.196	1445.3
106.8	108.05	33.803 D	-0.865 C	27.206	1445.4
107.8	109.05	33.814 D	-0.851 C	27.215	1445.5
108.8	110.00	33.826 D	-0.846 C	27.224	1445.5
109.8	111.15	33.837 D	-0.837 C	27.232	1445.6
110.8	112.15	33.844 D	-0.827 C	27.238	1445.7
111.8	113.10	33.853 D	-0.821 C	27.245	1445.8
112.8	114.05	33.860 D	-0.815 C	27.250	1445.8
113.8	115.20	33.866 D	-0.809 C	27.255	1445.9
114.8	116.15	33.872 D	-0.805 C	27.260	1445.9
115.8	117.05	33.878 D	-0.799 C	27.264	1446.0
116.8	118.20	33.883 D	-0.792 C	27.268	1446.0
117.8	119.35	33.895 D	-0.780 C	27.277	1446.1
118.8	120.30	33.903 D	-0.774 C	27.284	1446.2
119.8	121.25	33.909 D	-0.774 C	27.288	1446.2
120.8	122.30	33.914 D	-0.769 C	27.292	1446.2
121.8	123.30	33.920 D	-0.763 C	27.297	1446.3
122.8	124.10	33.925 D	-0.759 C	27.301	1446.3
123.8	125.25	33.930 D	-0.751 C	27.304	1446.4
124.8	126.40	33.940 D	-0.740 C	27.312	1446.5
125.8	127.30	33.952 D	-0.732 C	27.322	1446.5
126.8	128.30	33.961 D	-0.721 C	27.329	1446.6
127.8	129.40	33.967 D	-0.716 C	27.333	1446.7
128.8	130.50	33.982 D	-0.708 C	27.345	1446.7
129.8	131.40	33.985 D	-0.704 C	27.347	1446.8
130.8	132.45	33.990 D	-0.696 C	27.351	1446.8
131.8	133.35	34.004 D	-0.688 C	27.362	1446.9
132.8	134.55	34.009 D	-0.680 C	27.365	1447.0

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
133.8	135.50	34.018 D	-0.676 C	27.373	1447.0
134.8	136.50	34.026 D	-0.669 C	27.379	1447.1
135.8	137.30	34.033 D	-0.662 C	27.385	1447.1
136.8	138.45	34.042 D	-0.657 C	27.391	1447.2
137.8	139.55	34.047 D	-0.648 C	27.395	1447.3
138.8	140.55	34.055 D	-0.643 C	27.401	1447.3
139.8	141.50	34.063 D	-0.638 C	27.408	1447.4
140.8	142.55	34.069 D	-0.633 C	27.412	1447.4
141.8	143.60	34.073 D	-0.626 C	27.415	1447.5
142.8	144.55	34.081 D	-0.622 C	27.422	1447.5
143.8	145.60	34.091 D	-0.613 C	27.429	1447.6
144.8	146.70	34.101 D	-0.603 C	27.436	1447.7
145.8	147.75	34.113 D	-0.589 C	27.446	1447.8
146.8	148.70	34.130 D	-0.572 C	27.459	1447.9
147.8	149.75	34.147 D	-0.560 C	27.472	1448.0
148.8	150.75	34.164 D	-0.539 C	27.435	1448.1
149.8	151.70	34.188 D	-0.519 C	27.504	1448.3
150.8	152.85	34.205 D	-0.506 C	27.516	1448.4
151.8	153.75	34.219 D	-0.492 C	27.527	1448.5
152.8	154.80	34.232 D	-0.480 C	27.537	1448.6
153.8	155.80	34.241 D	-0.466 C	27.545	1448.6
154.8	156.90	34.258 D	-0.453 C	27.557	1448.7
155.8	157.90	34.270 D	-0.449 C	27.567	1448.8
156.8	158.75	34.272 D	-0.445 C	27.569	1448.8
157.8	159.70	34.277 D	-0.438 C	27.572	1448.9
158.8	160.90	34.281 D	-0.433 C	27.575	1448.9
159.8	161.75	34.287 D	-0.430 C	27.580	1449.0
160.8	162.95	34.294 D	-0.423 C	27.585	1449.0
161.8	163.85	34.301 D	-0.418 C	27.590	1449.1
162.8	165.00	34.304 D	-0.409 C	27.593	1449.1
163.8	165.95	34.311 D	-0.404 C	27.598	1449.2
164.8	166.95	34.316 D	-0.400 C	27.602	1449.2
165.8	167.95	34.324 D	-0.393 C	27.608	1449.3
166.8	169.00	34.331 D	-0.391 C	27.613	1449.3
167.8	170.05	34.334 D	-0.382 C	27.616	1449.4
168.8	171.00	34.343 D	-0.381 C	27.623	1449.4
169.8	172.00	34.348 D	-0.372 C	27.626	1449.5
170.8	173.00	34.355 D	-0.362 C	27.631	1449.6
171.8	174.20	34.359 D	-0.350 C	27.634	1449.6
172.8	175.15	34.369 D	-0.339 C	27.642	1449.7
173.8	176.20	34.377 D	-0.329 C	27.648	1449.8
174.8	177.05	34.384 D	-0.326 C	27.653	1449.8
175.8	178.15	34.390 D	-0.313 C	27.658	1449.9
176.8	179.05	34.400 D	-0.309 C	27.666	1450.0
177.8	180.20	34.407 D	-0.301 C	27.671	1450.0
178.8	181.20	34.412 D	-0.296 C	27.675	1450.1
179.8	182.20	34.418 D	-0.289 C	27.679	1450.1
180.8	183.20	34.420 D	-0.270 C	27.680	1450.2
181.8	184.30	34.430 D	-0.260 C	27.687	1450.3
182.8	185.30	34.437 D	-0.259 C	27.693	1450.4
183.8	186.25	34.446 D	-0.253 C	27.700	1450.4
184.8	187.35	34.452 D	-0.243 C	27.704	1450.5
185.8	188.30	34.458 D	-0.239 C	27.709	1450.5
186.8	189.25	34.462 D	-0.233 C	27.712	1450.6
187.8	190.45	34.469 D	-0.228 C	27.717	1450.6
188.8	191.45	34.473 D	-0.223 C	27.720	1450.7
189.8	192.45	34.477 D	-0.217 C	27.723	1450.7
190.8	193.40	34.483 D	-0.213 C	27.728	1450.8
191.8	194.30	34.496 D	-0.207 C	27.738	1450.8
192.8	195.40	34.489 D	-0.194 C	27.732	1450.9
193.8	196.60	34.500 D	-0.187 C	27.741	1451.0
194.8	197.35	34.511 D	-0.180 C	27.749	1451.0
195.8	198.50	34.513 D	-0.175 C	27.751	1451.1
196.8	199.35	34.520 D	-0.165 C	27.755	1451.1
197.8	200.55	34.525 D	-0.160 C	27.759	1451.2
198.8	201.50	34.530 D	-0.152 C	27.763	1451.2
199.8	202.60	34.536 D	-0.144 C	27.767	1451.3
200.8	203.55	34.540 D	-0.138 C	27.770	1451.4
201.8	204.55	34.545 D	-0.132 C	27.774	1451.4



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
202.8	205.75	34.549 D	-0.128 C	27.777	1451.4
203.8	206.50	34.555 D	-0.125 C	27.782	1451.5
204.8	207.65	34.558 D	-0.118 C	27.784	1451.5
205.8	208.55	34.564 D	-0.110 C	27.788	1451.6
206.8	209.70	34.567 D	-0.106 C	27.791	1451.6
207.8	210.65	34.572 D	-0.101 C	27.795	1451.7
208.8	211.70	34.577 D	-0.096 C	27.799	1451.7
209.8	212.75	34.581 D	-0.091 C	27.801	1451.8
210.8	213.65	34.585 D	-0.087 C	27.804	1451.8
211.8	214.80	34.589 D	-0.081 C	27.807	1451.9
212.8	215.85	34.591 D	-0.080 C	27.809	1451.9
213.8	216.85	34.595 D	-0.075 C	27.812	1451.9
214.8	217.85	34.599 D	-0.070 C	27.814	1452.0
215.8	218.85	34.602 D	-0.062 C	27.817	1452.0
216.8	219.70	34.607 D	-0.058 C	27.820	1452.1
217.8	220.85	34.611 D	-0.053 C	27.823	1452.1
218.8	222.00	34.616 D	-0.048 C	27.827	1452.2
219.8	223.00	34.618 D	-0.046 C	27.829	1452.2
220.8	223.85	34.623 D	-0.043 C	27.833	1452.2
221.8	224.95	34.626 D	-0.037 C	27.835	1452.3
222.8	225.95	34.628 D	-0.033 C	27.836	1452.3
223.8	226.95	34.630 D	-0.029 C	27.837	1452.4
224.8	227.90	34.637 D	-0.028 C	27.843	1452.4
225.8	229.05	34.637 D	-0.023 C	27.843	1452.4
226.8	230.10	34.643 D	-0.020 C	27.848	1452.5
227.8	231.10	34.645 D	-0.016 C	27.849	1452.5
228.8	231.95	34.649 D	-0.013 C	27.852	1452.5
229.8	233.00	34.649 D	-0.009 C	27.852	1452.6
230.8	234.15	34.654 D	-0.005 C	27.856	1452.6
231.8	235.15	34.658 D	-0.002 C	27.859	1452.7
232.8	236.20	34.663 D	0.001 C	27.863	1452.7
233.8	237.20	34.662 D	0.006 C	27.862	1452.7
234.8	238.15	34.664 D	0.010 C	27.864	1452.8
235.8	239.15	34.666 D	0.013 C	27.865	1452.8
236.8	240.15	34.665 D	0.020 C	27.863	1452.9
237.8	241.30	34.668 D	0.023 C	27.866	1452.9
238.8	242.15	34.669 D	0.028 C	27.866	1452.9
239.8	243.20	34.672 D	0.031 C	27.868	1453.0
240.8	244.35	34.673 D	0.033 C	27.869	1453.0
241.8	245.25	34.675 D	0.037 C	27.871	1453.0
242.8	246.30	34.677 D	0.039 C	27.872	1453.1
243.8	247.35	34.680 D	0.039 C	27.875	1453.1
244.8	248.40	34.680 D	0.044 C	27.874	1453.1
245.8	249.40	34.685 D	0.045 C	27.878	1453.1
246.8	250.30	34.687 D	0.049 C	27.880	1453.2
247.8	251.45	34.689 D	0.053 C	27.881	1453.2
248.8	252.55	34.692 D	0.054 C	27.883	1453.2
249.8	253.30	34.693 D	0.055 C	27.884	1453.3
250.8	254.40	34.693 D	0.058 C	27.884	1453.3
251.8	255.55	34.697 D	0.060 C	27.887	1453.3
252.8	256.50	34.699 D	0.064 C	27.889	1453.4
253.8	257.55	34.701 D	0.067 C	27.890	1453.4
254.8	258.35	34.702 D	0.067 C	27.891	1453.4
255.8	259.55	34.704 D	0.068 C	27.893	1453.4
256.8	260.60	34.702 D	0.073 C	27.891	1453.5
257.8	261.60	34.710 D	0.073 C	27.897	1453.5
258.8	262.60	34.708 D	0.077 C	27.895	1453.5
259.8	263.50	34.712 D	0.078 C	27.898	1453.6
260.8	264.50	34.715 D	0.081 C	27.901	1453.6
261.8	265.65	34.715 D	0.083 C	27.901	1453.6
262.8	266.80	34.718 D	0.084 C	27.903	1453.7
263.8	267.60	34.719 D	0.087 C	27.904	1453.7
264.8	268.70	34.719 D	0.091 C	27.903	1453.7
265.8	269.70	34.722 D	0.091 C	27.906	1453.7
266.8	270.75	34.725 D	0.093 C	27.908	1453.8
267.8	271.70	34.725 D	0.094 C	27.908	1453.8
268.8	272.80	34.729 D	0.096 C	27.911	1453.8
269.8	273.70	34.729 D	0.099 C	27.911	1453.9
270.8	274.90	34.732 D	0.101 C	27.913	1453.9



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
271.8	275.80	34.732 D	0.102 C	27.913	1453.9
272.8	276.90	34.731 D	0.106 C	27.912	1453.9
273.8	277.65	34.735 D	0.107 C	27.915	1454.0
274.8	278.80	34.739 D	0.109 C	27.918	1454.0
275.8	280.00	34.739 D	0.112 C	27.919	1454.0
276.8	281.00	34.740 D	0.113 C	27.919	1454.1
277.8	281.85	34.743 D	0.114 C	27.921	1454.1
278.8	282.80	34.742 D	0.113 C	27.921	1454.1
279.8	283.90	34.744 D	0.120 C	27.922	1454.1
280.8	285.00	34.746 D	0.121 C	27.924	1454.2
281.8	286.05	34.745 D	0.122 C	27.926	1454.2
282.8	287.10	34.751 D	0.123 C	27.927	1454.2
283.8	288.05	34.751 D	0.124 C	27.927	1454.2
284.8	289.10	34.752 D	0.126 C	27.928	1454.3
285.8	290.20	34.753 D	0.130 C	27.928	1454.3
286.8	291.10	34.756 D	0.132 C	27.931	1454.3
287.8	292.05	34.757 D	0.133 C	27.932	1454.3
288.8	293.15	34.759 D	0.134 C	27.933	1454.4
289.8	294.05	34.759 D	0.136 C	27.933	1454.4
290.8	295.15	34.762 D	0.137 C	27.935	1454.4
291.8	296.05	34.762 D	0.141 C	27.936	1454.5
292.8	297.05	34.767 D	0.143 C	27.939	1454.5
293.8	298.15	34.769 D	0.143 C	27.941	1454.5
294.8	299.25	34.767 D	0.145 C	27.939	1454.5
295.8	300.25	34.768 D	0.146 C	27.940	1454.6
296.8	301.15	34.769 D	0.149 C	27.940	1454.6
297.8	302.20	34.770 D	0.149 C	27.941	1454.6
298.8	303.20	34.772 D	0.151 C	27.943	1454.6
299.8	304.40	34.772 D	0.156 C	27.942	1454.7
300.8	305.40	34.777 D	0.155 C	27.946	1454.7
301.8	306.40	34.779 D	0.155 C	27.948	1454.7
302.8	307.45	34.778 D	0.156 C	27.948	1454.7
303.8	308.50	34.778 D	0.156 C	27.947	1454.8
304.8	309.50	34.776 D	0.158 C	27.946	1454.8
305.8	310.10	34.780 D	0.157 C	27.949	1454.8
306.8	311.20	34.780 D	0.159 C	27.949	1454.8
307.8	312.20	34.780 D	0.161 C	27.949	1454.8
308.8	313.25	34.782 D	0.161 C	27.951	1454.9
309.8	314.15	34.784 D	0.163 C	27.952	1454.9
310.8	315.25	34.785 D	0.164 C	27.952	1454.9
311.8	316.25	34.786 D	0.166 C	27.953	1454.9
312.8	317.20	34.787 D	0.167 C	27.954	1455.0
313.8	318.30	34.787 D	0.169 C	27.954	1455.0
314.8	319.25	34.788 D	0.169 C	27.955	1455.0
315.8	320.35	34.789 D	0.170 C	27.956	1455.0
316.8	321.30	34.790 D	0.170 C	27.956	1455.0
317.8	322.45	34.792 D	0.171 C	27.958	1455.1
318.8	323.40	34.791 D	0.173 C	27.957	1455.1
319.8	324.30	34.791 D	0.174 C	27.957	1455.1
320.8	325.40	34.792 D	0.175 C	27.958	1455.1
321.8	326.50	34.795 D	0.177 C	27.960	1455.2
322.8	327.30	34.794 D	0.177 C	27.959	1455.2
323.8	328.50	34.794 D	0.179 C	27.959	1455.2
324.8	329.50	34.797 D	0.179 C	27.962	1455.2
325.8	330.50	34.795 D	0.180 C	27.959	1455.2
326.8	331.60	34.798 D	0.180 C	27.962	1455.3
327.8	332.45	34.798 D	0.182 C	27.962	1455.3
328.8	333.50	34.800 D	0.182 C	27.964	1455.3
329.8	334.75	34.802 D	0.184 C	27.965	1455.3
330.8	335.55	34.801 D	0.187 C	27.964	1455.4
331.8	336.55	34.805 D	0.190 C	27.968	1455.4
332.8	337.65	34.808 D	0.191 C	27.969	1455.4
333.8	338.60	34.808 D	0.193 C	27.969	1455.5
334.8	339.65	34.809 D	0.195 C	27.970	1455.5
335.8	340.60	34.812 D	0.196 C	27.972	1455.5
336.8	341.65	34.813 D	0.197 C	27.973	1455.5
337.8	342.60	34.814 D	0.198 C	27.974	1455.6
338.8	343.75	34.812 D	0.200 C	27.973	1455.6
339.8	344.85	34.813 D	0.201 C	27.974	1455.6

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
340.8	345.70	34.817 D	0.199 C	27.976	1455.6
341.8	346.80	34.818 D	0.201 C	27.977	1455.6
342.8	347.90	34.816 D	0.202 C	27.976	1455.7
343.8	348.90	34.818 D	0.202 C	27.978	1455.7
344.8	349.80	34.818 D	0.202 C	27.977	1455.7
345.8	350.95	34.818 D	0.204 C	27.977	1455.7
346.8	351.75	34.819 D	0.205 C	27.978	1455.7
347.8	353.00	34.821 D	0.205 C	27.980	1455.8
348.8	354.00	34.820 D	0.208 C	27.978	1455.8
349.8	355.05	34.822 D	0.208 C	27.980	1455.8
350.8	355.95	34.822 D	0.209 C	27.980	1455.8
351.8	357.00	34.824 D	0.209 C	27.982	1455.9
352.8	357.85	34.825 D	0.210 C	27.983	1455.9
353.8	359.15	34.825 D	0.211 C	27.982	1455.9
354.8	360.05	34.825 D	0.212 C	27.982	1455.9
355.8	361.05	34.828 D	0.211 C	27.985	1455.9
356.8	362.05	34.829 D	0.213 C	27.986	1456.0
357.8	363.00	34.829 D	0.214 C	27.986	1456.0
358.8	364.20	34.829 D	0.215 C	27.985	1456.0
359.8	365.15	34.830 D	0.216 C	27.986	1456.0
360.8	366.25	34.831 D	0.216 C	27.987	1456.0
361.8	367.15	34.831 D	0.218 C	27.987	1456.1
362.8	368.05	34.833 D	0.217 C	27.988	1456.1
363.8	369.25	34.832 D	0.218 C	27.988	1456.1
364.8	370.20	34.833 D	0.219 C	27.989	1456.1
365.8	371.35	34.833 D	0.219 C	27.988	1456.1
366.8	372.20	34.834 D	0.219 C	27.989	1456.2
367.8	373.35	34.834 D	0.219 C	27.990	1456.2
368.8	374.15	34.837 D	0.221 C	27.992	1456.2
369.8	375.35	34.837 D	0.221 C	27.991	1456.2
370.8	376.30	34.839 D	0.221 C	27.993	1456.2
371.8	377.30	34.838 D	0.221 C	27.993	1456.3
372.8	378.45	34.837 D	0.223 C	27.991	1456.3
373.8	379.40	34.836 D	0.223 C	27.991	1456.3
374.8	380.30	34.837 D	0.224 C	27.992	1456.3
375.8	381.45	34.838 D	0.224 C	27.992	1456.3
376.8	382.55	34.839 D	0.225 C	27.993	1456.4
377.8	383.40	34.841 D	0.224 C	27.995	1456.4
378.8	384.35	34.841 D	0.225 C	27.995	1456.4
379.8	385.50	34.841 D	0.227 C	27.994	1456.4
380.8	386.65	34.842 D	0.227 C	27.995	1456.4
381.8	387.55	34.843 D	0.227 C	27.996	1456.5
382.8	388.55	34.843 D	0.227 C	27.996	1456.5
383.8	389.65	34.844 D	0.227 C	27.997	1456.5
384.8	390.65	34.844 D	0.229 C	27.997	1456.5
385.8	391.45	34.845 D	0.228 C	27.997	1456.5
386.8	392.60	34.844 D	0.229 C	27.997	1456.6
387.8	393.65	34.847 D	0.229 C	27.999	1456.6
388.8	394.50	34.846 D	0.230 C	27.999	1456.6
389.8	395.65	34.847 D	0.230 C	27.999	1456.6
390.8	396.75	34.847 D	0.231 C	27.999	1456.6
391.8	397.60	34.848 D	0.231 C	28.000	1456.7
392.8	398.70	34.849 D	0.231 C	28.000	1456.7
393.8	399.80	34.847 D	0.232 C	27.999	1456.7
394.8	400.85	34.849 D	0.232 C	28.001	1456.7
395.8	401.70	34.849 D	0.233 C	28.000	1456.7
396.8	402.70	34.850 D	0.233 C	28.001	1456.8
397.8	403.80	34.848 D	0.235 C	28.000	1456.8
398.8	404.90	34.850 D	0.234 C	28.001	1456.8
399.8	405.85	34.849 D	0.234 C	28.001	1456.8
400.8	406.90	34.849 D	0.235 C	28.000	1456.8
401.8	407.90	34.852 D	0.234 C	28.003	1456.8
402.8	408.85	34.851 D	0.235 C	28.002	1456.9
403.8	409.80	34.852 D	0.235 C	28.003	1456.9
404.8	410.90	34.849 D	0.237 C	28.000	1456.9
405.8	411.85	34.851 D	0.236 C	28.002	1456.9
406.8	412.90	34.851 D	0.235 C	28.002	1456.9
407.8	413.95	34.854 D	0.235 C	28.004	1456.9
408.8	415.00	34.853 D	0.235 C	28.004	1457.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
409.8	415.90	34.852 D	0.237 C	28.002	1457.0
410.8	416.90	34.853 D	0.236 C	28.004	1457.0
411.8	418.10	34.853 D	0.237 C	28.004	1457.0
412.8	419.00	34.853 D	0.237 C	28.003	1457.0
413.8	420.20	34.854 D	0.236 C	28.005	1457.1
414.8	421.15	34.854 D	0.236 C	28.004	1457.1
415.8	422.05	34.855 D	0.237 C	28.005	1457.1
416.8	423.20	34.855 D	0.238 C	28.005	1457.1
417.8	424.05	34.854 D	0.238 C	28.004	1457.1
418.8	425.05	34.855 D	0.238 C	28.005	1457.1
419.8	426.35	34.854 D	0.239 C	28.005	1457.2
420.8	427.30	34.855 D	0.239 C	28.005	1457.2
421.8	428.25	34.858 D	0.237 C	28.008	1457.2
422.8	429.15	34.857 D	0.239 C	28.007	1457.2
423.8	430.25	34.858 D	0.238 C	28.007	1457.2
424.8	431.40	34.856 D	0.239 C	28.006	1457.3
425.8	432.45	34.857 D	0.239 C	28.006	1457.3
426.8	433.35	34.859 D	0.238 C	28.008	1457.3
427.8	434.25	34.858 D	0.239 C	28.008	1457.3
428.8	435.20	34.858 D	0.240 C	28.007	1457.3
429.8	436.40	34.857 D	0.240 C	28.007	1457.3
430.8	437.45	34.858 D	0.240 C	28.008	1457.4
431.8	438.45	34.859 D	0.239 C	28.008	1457.4
432.8	439.40	34.859 D	0.241 C	28.008	1457.4
433.8	440.50	34.858 D	0.241 C	28.007	1457.4
434.8	441.30	34.860 D	0.240 C	28.009	1457.4
435.8	442.50	34.860 D	0.241 C	28.009	1457.5
436.8	443.60	34.861 D	0.241 C	28.009	1457.5
437.8	444.50	34.861 D	0.240 C	28.010	1457.5
438.8	445.40	34.861 D	0.241 C	28.010	1457.5
439.8	446.65	34.859 D	0.242 C	28.008	1457.5
440.8	447.65	34.862 D	0.240 C	28.011	1457.5
441.8	448.45	34.862 D	0.241 C	28.011	1457.6
442.8	449.65	34.859 D	0.242 C	28.008	1457.6
443.8	450.65	34.861 D	0.241 C	28.010	1457.6
444.8	451.60	34.860 D	0.242 C	28.009	1457.6
445.8	452.50	34.863 D	0.241 C	28.011	1457.6
446.8	453.60	34.863 D	0.240 C	28.011	1457.6
447.8	454.70	34.864 D	0.240 C	28.012	1457.7
448.8	455.75	34.859 D	0.242 C	28.008	1457.7
449.8	456.70	34.863 D	0.241 C	28.011	1457.7
450.8	457.80	34.864 D	0.241 C	28.012	1457.7
451.8	458.70	34.862 D	0.242 C	28.010	1457.7
452.8	459.75	34.864 D	0.241 C	28.012	1457.7
453.8	460.75	34.862 D	0.242 C	28.011	1457.8
454.8	461.75	34.864 D	0.241 C	28.012	1457.8
455.8	462.85	34.864 D	0.241 C	28.012	1457.8
456.8	463.85	34.863 D	0.242 C	28.011	1457.8
457.8	464.70	34.863 D	0.242 C	28.011	1457.8
458.8	465.90	34.863 D	0.242 C	28.012	1457.8
459.8	466.90	34.863 D	0.243 C	28.011	1457.9
460.8	467.90	34.865 D	0.242 C	28.013	1457.9
461.8	469.05	34.864 D	0.242 C	28.012	1457.9
462.8	470.05	34.863 D	0.243 C	28.011	1457.9
463.8	471.00	34.862 D	0.244 C	28.011	1457.9
464.8	472.05	34.864 D	0.243 C	28.012	1458.0
465.8	473.15	34.864 D	0.243 C	28.012	1458.0
466.8	474.05	34.864 D	0.244 C	28.012	1458.0
467.8	475.05	34.866 D	0.243 C	28.013	1458.0
468.8	476.15	34.863 D	0.245 C	28.011	1458.0
469.8	476.95	34.865 D	0.244 C	28.013	1458.0
470.8	478.20	34.866 D	0.243 C	28.014	1458.1
471.8	479.00	34.865 D	0.244 C	28.013	1458.1
472.8	480.05	34.867 D	0.243 C	28.014	1458.1
473.8	481.25	34.865 D	0.244 C	28.013	1458.1
474.8	482.20	34.866 D	0.244 C	28.013	1458.1
475.8	483.20	34.868 D	0.243 C	28.015	1458.1
476.8	484.25	34.867 D	0.243 C	28.015	1458.2
477.8	485.20	34.867 D	0.243 C	28.014	1458.2



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
478.8	486.30	34.866 D	0.244 C	28.014	1458.2
479.8	487.25	34.867 D	0.244 C	28.015	1458.2
480.8	488.35	34.865 D	0.245 C	28.013	1458.2
481.8	489.40	34.868 D	0.243 C	28.016	1458.2
482.8	490.20	34.868 D	0.243 C	28.015	1458.3
483.8	491.35	34.866 D	0.244 C	28.014	1458.3
484.8	492.25	34.868 D	0.243 C	28.015	1458.3
485.8	493.35	34.869 D	0.243 C	28.016	1458.3
486.8	494.30	34.865 D	0.245 C	28.013	1458.3
487.8	495.35	34.868 D	0.243 C	28.015	1458.3
488.8	496.40	34.868 D	0.244 C	28.015	1458.4
489.8	497.45	34.866 D	0.245 C	28.013	1458.4
490.8	498.45	34.867 D	0.243 C	28.015	1458.4
491.8	499.40	34.867 D	0.244 C	28.015	1458.4
492.8	500.50	34.868 D	0.245 C	28.015	1458.4
493.8	501.55	34.866 D	0.245 C	28.014	1458.5
494.8	502.50	34.869 D	0.243 C	28.016	1458.5
495.8	503.65	34.869 D	0.244 C	28.016	1458.5
496.8	504.50	34.867 D	0.245 C	28.015	1458.5
497.8	505.55	34.868 D	0.244 C	28.015	1458.5
498.8	506.65	34.869 D	0.244 C	28.016	1458.5
499.8	507.50	34.870 D	0.244 C	28.016	1458.6
500.8	508.60	34.869 D	0.244 C	28.016	1458.6
501.8	509.55	34.867 D	0.245 C	28.015	1458.6
502.8	510.60	34.869 D	0.244 C	28.016	1458.6
503.8	511.70	34.869 D	0.244 C	28.016	1458.6
504.8	512.75	34.868 D	0.245 C	28.015	1458.6
505.8	513.75	34.871 D	0.243 C	28.018	1458.7
506.8	514.80	34.871 D	0.243 C	28.017	1458.7
507.8	515.80	34.868 D	0.245 C	28.015	1458.7
508.8	516.90	34.868 D	0.244 C	28.015	1458.7
509.8	517.80	34.871 D	0.244 C	28.017	1458.7
510.8	518.85	34.869 D	0.244 C	28.016	1458.7
511.8	519.90	34.868 D	0.245 C	28.015	1458.8
512.8	521.00	34.870 D	0.244 C	28.017	1458.8
513.8	521.90	34.870 D	0.244 C	28.017	1458.8
514.8	522.80	34.870 D	0.243 C	28.017	1458.8
515.8	523.90	34.870 D	0.244 C	28.017	1458.8
516.8	525.00	34.869 D	0.244 C	28.016	1458.8
517.8	525.95	34.870 D	0.244 C	28.017	1458.9
518.8	526.95	34.871 D	0.244 C	28.018	1458.9
519.8	527.95	34.870 D	0.244 C	28.017	1458.9
520.8	528.85	34.871 D	0.244 C	28.018	1458.9
521.8	530.00	34.871 D	0.244 C	28.017	1458.9
522.8	531.15	34.870 D	0.244 C	28.017	1458.9
523.8	532.00	34.870 D	0.245 C	28.017	1459.0
524.8	533.05	34.871 D	0.243 C	28.018	1459.0
525.8	533.95	34.871 D	0.244 C	28.018	1459.0
526.8	535.05	34.871 D	0.244 C	28.017	1459.0
527.8	536.05	34.871 D	0.244 C	28.018	1459.0
528.8	537.15	34.870 D	0.245 C	28.016	1459.0
529.8	538.25	34.871 D	0.244 C	28.018	1459.1
530.8	539.15	34.871 D	0.244 C	28.018	1459.1
531.8	540.15	34.872 D	0.244 C	28.018	1459.1
532.8	541.25	34.872 D	0.243 C	28.019	1459.1
533.8	542.15	34.872 D	0.243 C	28.018	1459.1
534.8	543.30	34.873 D	0.243 C	28.019	1459.1
535.8	544.25	34.871 D	0.244 C	28.017	1459.2
536.8	545.35	34.873 D	0.243 C	28.019	1459.2
537.8	546.10	34.871 D	0.244 C	28.018	1459.2
538.8	546.95	34.873 D	0.243 C	28.019	1459.2
539.8	548.10	34.873 D	0.243 C	28.019	1459.2
540.8	549.15	34.872 D	0.243 C	28.018	1459.2
541.8	550.15	34.871 D	0.243 C	28.018	1459.3
542.8	551.15	34.872 D	0.244 C	28.019	1459.3
543.8	552.10	34.873 D	0.243 C	28.019	1459.3
544.8	553.15	34.874 D	0.242 C	28.020	1459.3
545.8	554.10	34.872 D	0.243 C	28.018	1459.3
546.8	555.20	34.873 D	0.243 C	28.019	1459.3

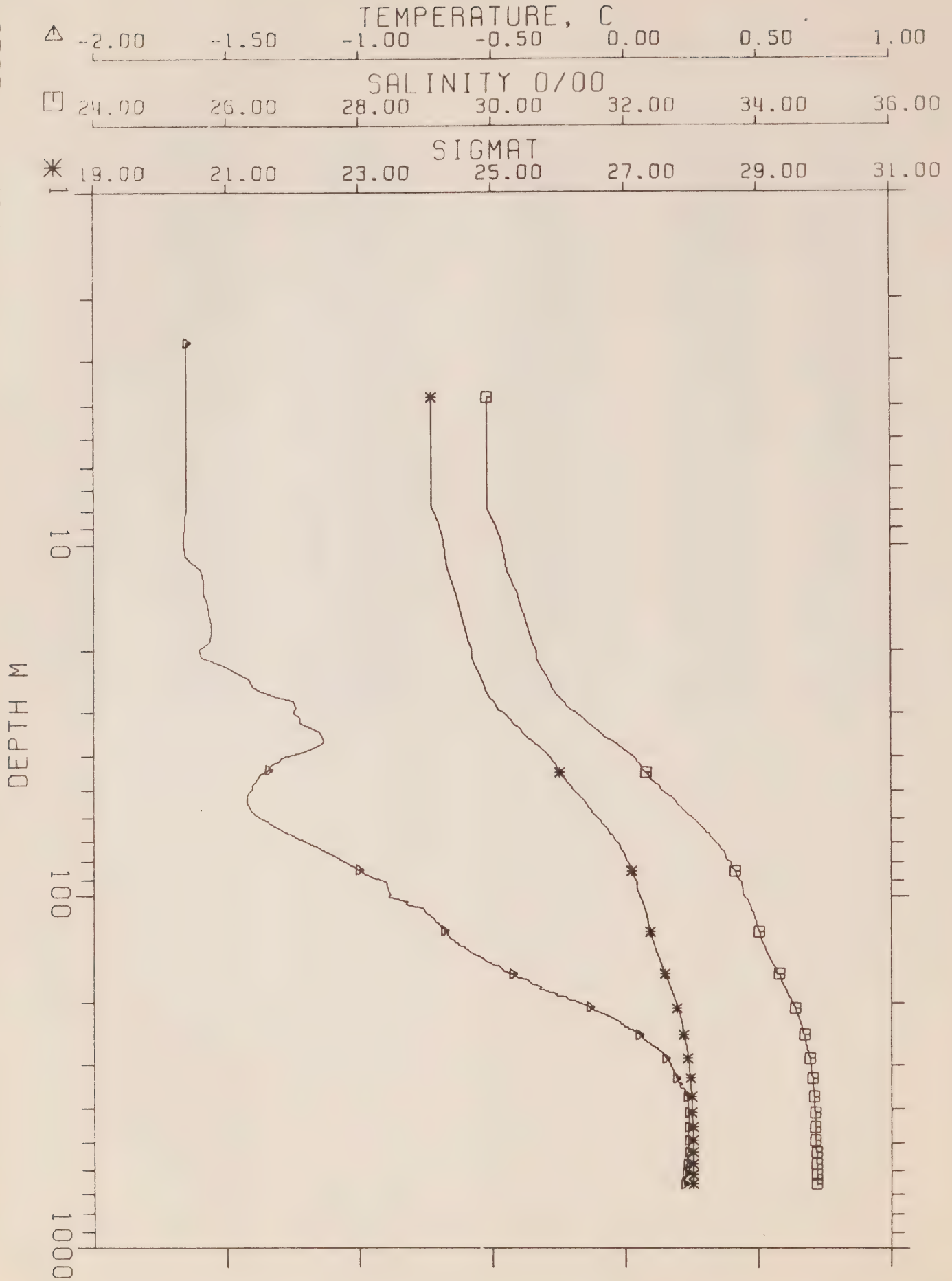
DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
547.8	556.05	34.875 D	0.242 C	28.021	1459.3
548.8	557.25	34.873 D	0.242 C	28.019	1459.4
549.8	558.20	34.876 D	0.241 C	28.022	1459.4
550.8	559.25	34.875 D	0.241 C	28.021	1459.4
551.8	560.20	34.874 D	0.242 C	28.020	1459.4
552.8	561.40	34.876 D	0.241 C	28.021	1459.4
553.8	562.30	34.873 D	0.242 C	28.019	1459.4
554.8	563.45	34.873 D	0.242 C	28.020	1459.5
555.8	564.45	34.874 D	0.241 C	28.020	1459.5
556.8	565.25	34.871 D	0.243 C	28.018	1459.5
557.8	566.40	34.874 D	0.242 C	28.020	1459.5
558.8	567.25	34.874 D	0.241 C	28.020	1459.5
559.8	568.50	34.876 D	0.241 C	28.022	1459.6
560.8	569.25	34.874 D	0.242 C	28.020	1459.6
561.8	570.50	34.875 D	0.241 C	28.021	1459.6
562.8	571.35	34.874 D	0.242 C	28.020	1459.6
563.8	572.55	34.874 D	0.242 C	28.020	1459.6
564.8	573.35	34.874 D	0.241 C	28.020	1459.6
565.8	574.25	34.874 D	0.242 C	28.020	1459.6
566.8	575.30	34.876 D	0.241 C	28.022	1459.7
567.8	576.35	34.873 D	0.242 C	28.019	1459.7
568.8	577.35	34.876 D	0.240 C	28.022	1459.7
569.8	578.30	34.874 D	0.241 C	28.020	1459.7
570.8	579.40	34.875 D	0.240 C	28.021	1459.7
571.8	580.40	34.876 D	0.240 C	28.022	1459.7
572.8	581.45	34.874 D	0.241 C	28.020	1459.8
573.8	582.45	34.877 D	0.240 C	28.023	1459.8
574.8	583.30	34.874 D	0.241 C	28.020	1459.8
575.8	584.50	34.875 D	0.240 C	28.021	1459.8
576.8	585.45	34.874 D	0.241 C	28.020	1459.8
577.8	586.45	34.874 D	0.241 C	28.020	1459.8
578.8	587.60	34.876 D	0.240 C	28.022	1459.9
579.8	588.40	34.874 D	0.240 C	28.020	1459.9
580.8	589.55	34.876 D	0.240 C	28.022	1459.9
581.8	590.70	34.874 D	0.240 C	28.020	1459.9
582.8	591.45	34.876 D	0.239 C	28.022	1459.9
583.8	592.70	34.874 D	0.240 C	28.020	1459.9
584.8	593.60	34.876 D	0.240 C	28.022	1460.0
585.8	594.65	34.874 D	0.240 C	28.021	1460.0
586.8	595.50	34.876 D	0.239 C	28.022	1460.0
587.8	596.65	34.877 D	0.239 C	28.023	1460.0
588.8	597.70	34.875 D	0.240 C	28.021	1460.0
589.8	598.65	34.875 D	0.239 C	28.021	1460.0
590.8	599.80	34.876 D	0.239 C	28.022	1460.1
591.8	600.85	34.875 D	0.239 C	28.021	1460.1
592.8	601.65	34.875 D	0.238 C	28.021	1460.1
593.8	602.80	34.877 D	0.237 C	28.023	1460.1
594.8	603.90	34.877 D	0.237 C	28.023	1460.1
595.8	604.65	34.874 D	0.238 C	28.020	1460.1
596.8	605.80	34.877 D	0.237 C	28.023	1460.1
597.8	606.75	34.878 D	0.236 C	28.023	1460.2
598.8	607.90	34.877 D	0.236 C	28.023	1460.2
599.8	608.95	34.875 D	0.237 C	28.021	1460.2
600.8	609.80	34.879 D	0.236 C	28.024	1460.2
601.8	611.05	34.876 D	0.236 C	28.022	1460.2
602.8	611.85	34.877 D	0.235 C	28.023	1460.2
603.8	613.10	34.877 D	0.236 C	28.023	1460.3
604.8	613.95	34.878 D	0.236 C	28.023	1460.3
605.8	615.10	34.878 D	0.235 C	28.024	1460.3
606.8	616.00	34.878 D	0.236 C	28.024	1460.3
607.8	616.90	34.878 D	0.235 C	28.024	1460.3
608.8	618.05	34.877 D	0.236 C	28.023	1460.3
609.8	619.00	34.878 D	0.234 C	28.024	1460.4
610.8	620.05	34.879 D	0.234 C	28.025	1460.4
611.8	621.00	34.877 D	0.234 C	28.023	1460.4
612.8	622.15	34.879 D	0.233 C	28.025	1460.4
613.8	623.10	34.879 D	0.233 C	28.024	1460.4
614.8	624.20	34.878 D	0.233 C	28.024	1460.4
615.8	625.20	34.880 D	0.232 C	28.025	1460.4

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
616.8	626.15	34.879 D	0.231 C	28.025	1460.5
617.8	627.30	34.880 D	0.231 C	28.025	1460.5
618.8	628.05	34.878 D	0.232 C	28.024	1460.5
619.8	629.30	34.880 D	0.230 C	28.025	1460.5
620.8	630.35	34.878 D	0.231 C	28.024	1460.5
621.8	631.25	34.880 D	0.229 C	28.025	1460.5
622.8	632.20	34.880 D	0.230 C	28.025	1460.6
623.8	633.30	34.880 D	0.229 C	28.026	1460.6
624.8	634.30	34.881 D	0.228 C	28.026	1460.6
625.8	635.20	34.879 D	0.228 C	28.025	1460.6
626.8	636.45	34.879 D	0.228 C	28.025	1460.6
627.8	637.25	34.880 D	0.227 C	28.026	1460.6
628.8	638.45	34.879 D	0.227 C	28.025	1460.6
629.8	639.45	34.880 D	0.226 C	28.026	1460.7
630.8	640.45	34.881 D	0.226 C	28.026	1460.7
631.8	641.30	34.880 D	0.226 C	28.026	1460.7
632.8	642.45	34.880 D	0.226 C	28.025	1460.7
633.8	643.25	34.880 D	0.226 C	28.026	1460.7
634.8	644.35	34.877 D	0.227 C	28.024	1460.7
635.8	645.30	34.878 D	0.227 C	28.024	1460.8
636.8	646.20	34.882 D	0.224 C	28.028	1460.8
637.8	647.20	34.881 D	0.225 C	28.026	1460.8
638.8	648.25	34.879 D	0.226 C	28.025	1460.8
639.8	649.35	34.880 D	0.226 C	28.026	1460.8
640.8	650.40	34.880 D	0.225 C	28.026	1460.8
641.8	651.45	34.878 D	0.226 C	28.025	1460.9
642.8	652.40	34.880 D	0.225 C	28.026	1460.9
643.8	653.30	34.881 D	0.225 C	28.027	1460.9
644.8	654.35	34.880 D	0.226 C	28.026	1460.9
645.8	655.45	34.883 D	0.224 C	28.028	1460.9
646.8	656.45	34.883 D	0.223 C	28.029	1460.9
647.8	657.50	34.883 D	0.223 C	28.028	1460.9
648.8	658.50	34.882 D	0.224 C	28.028	1461.0
649.8	659.45	34.884 D	0.223 C	28.029	1461.0
650.8	660.55	34.880 D	0.225 C	28.026	1461.0





EXPERIMENT 2026



CRUISE 15-76-015

GREELY FIORD-76

EXPER NO. 2026

LAT N.80-28-00

LONG W.86-00-00

WATER DEPTH 680

DEPTH INCR.

DATE 260376

LOCAL TIME 1155

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
3.8	2.65		-1.648 D		
4.8	3.80	29.941 E	-1.648 D	24.100	1434.6
5.8	4.55	29.939 E	-1.649 D	24.098	1434.6
6.8	5.55	29.935 E	-1.649 D	24.096	1434.6
7.8	6.70	29.933 E	-1.649 D	24.094	1434.6
8.8	7.80	29.938 E	-1.649 D	24.093	1434.6
9.8	8.65	30.069 E	-1.657 D	24.204	1434.8
10.8	9.80	30.168 E	-1.661 D	24.285	1434.9
11.8	10.70	30.190 E	-1.657 D	24.302	1435.0
12.8	11.85	30.246 E	-1.595 D	24.347	1435.4
13.8	12.80	30.323 E	-1.586 D	24.409	1435.6
14.8	13.80	30.392 E	-1.587 D	24.465	1435.7
15.8	14.85	30.443 E	-1.571 D	24.506	1435.8
16.8	15.85	30.496 E	-1.566 D	24.549	1435.9
17.8	16.85	30.543 E	-1.553 D	24.586	1436.1
18.8	17.85	30.577 E	-1.553 D	24.614	1436.2
19.8	18.80	30.619 E	-1.560 D	24.648	1436.2
20.8	19.80	30.670 E	-1.602 D	24.690	1436.1
21.8	20.90	30.690 E	-1.593 D	24.706	1436.2
22.8	21.95	30.737 E	-1.511 D	24.743	1436.6
23.8	22.85	30.788 E	-1.474 D	24.784	1436.9
24.8	23.95	30.854 E	-1.417 D	24.836	1437.3
25.8	25.00	30.900 E	-1.403 D	24.873	1437.4
26.8	25.90	30.942 E	-1.379 D	24.907	1437.6
27.8	26.80	30.997 E	-1.326 D	24.950	1438.0
28.8	27.90	31.086 E	-1.246 D	25.020	1438.5
29.8	29.15	31.172 E	-1.236 D	25.090	1439.7
30.8	30.15	31.285 E	-1.243 D	25.181	1438.8
31.8	31.10	31.378 E	-1.222 D	25.256	1439.1
32.8	32.05	31.463 E	-1.220 D	25.325	1439.2
33.8	33.00	31.548 E	-1.182 D	25.392	1439.5
34.8	34.15	31.630 E	-1.144 D	25.458	1439.3
35.8	35.00	31.701 E	-1.139 D	25.515	1440.0
36.8	36.20	31.841 E	-1.128 D	25.628	1440.2
37.8	37.15	31.927 E	-1.152 D	25.698	1440.3
38.8	38.15	31.991 E	-1.184 D	25.750	1440.2
39.8	39.15	32.077 E	-1.227 D	25.821	1440.2
40.8	40.25	32.158 E	-1.291 D	25.888	1440.0
41.8	41.25	32.208 E	-1.296 D	25.929	1440.0
42.8	42.10	32.249 E	-1.325 D	25.963	1440.0
43.8	43.35	32.276 E	-1.339 D	25.985	1440.0
44.8	44.25	32.321 E	-1.355 D	26.022	1440.0
45.8	45.25	32.353 E	-1.368 D	26.049	1440.0
46.8	46.25	32.406 E	-1.378 D	26.092	1440.0
47.8	47.25	32.461 E	-1.388 D	26.136	1440.1
48.8	48.25	32.512 E	-1.399 D	26.178	1440.1
49.8	49.40	32.566 E	-1.402 D	26.221	1440.2
50.8	50.35	32.605 E	-1.409 D	26.254	1440.2
51.8	51.45	32.654 E	-1.416 D	26.293	1440.3
52.8	52.40	32.713 E	-1.422 D	26.341	1440.3
53.8	53.20	32.763 E	-1.421 D	26.381	1440.4
54.8	54.35	32.808 E	-1.419 D	26.418	1440.5
55.8	55.40	32.846 E	-1.413 D	26.448	1440.6
56.8	56.40	32.876 E	-1.408 D	26.473	1440.7
57.8	57.45	32.922 E	-1.400 D	26.509	1440.3
58.8	58.40	32.966 E	-1.390 D	26.545	1440.9
59.8	59.30	33.010 E	-1.373 D	26.581	1441.1
60.8	60.50	33.057 E	-1.357 D	26.618	1441.3
61.8	61.35	33.097 E	-1.339 D	26.650	1441.4
62.8	62.45	33.135 E	-1.325 D	26.681	1441.6
63.8	63.50	33.174 E	-1.309 D	26.712	1441.7
64.8	64.40	33.202 E	-1.296 D	26.734	1441.8



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
65.8	65.60	33.239 E	-1.273 D	26.763	1442.0
66.8	66.60	33.276 E	-1.256 D	26.792	1442.1
67.8	67.60	33.303 E	-1.241 D	26.814	1442.3
68.8	68.65	33.336 E	-1.221 D	26.840	1442.4
69.8	69.50	33.368 E	-1.203 D	26.866	1442.6
70.8	70.70	33.408 E	-1.185 D	26.897	1442.7
71.8	71.70	33.434 E	-1.164 D	26.917	1442.9
72.8	72.75	33.449 E	-1.143 D	26.929	1443.0
73.8	73.65	33.472 E	-1.139 D	26.948	1443.1
74.8	74.60	33.491 E	-1.126 D	26.963	1443.2
75.8	75.70	33.510 E	-1.112 D	26.978	1443.3
76.8	76.60	33.528 E	-1.097 D	26.992	1443.4
77.8	77.70	33.549 E	-1.077 D	27.008	1443.6
78.8	78.80	33.570 E	-1.066 D	27.024	1443.7
79.8	79.90	33.592 E	-1.051 D	27.042	1443.8
80.8	80.85	33.610 E	-1.040 D	27.056	1443.9
81.8	81.70	33.624 E	-1.022 D	27.067	1444.0
82.8	82.85	33.638 E	-1.011 D	27.078	1444.1
83.8	83.85	33.651 E	-1.002 D	27.088	1444.1
84.8	84.90	33.661 E	-0.992 D	27.096	1444.2
85.8	85.95	33.673 E	-0.979 D	27.105	1444.3
86.8	86.90	33.683 E	-0.970 D	27.113	1444.4
87.8	87.95	33.696 E	-0.956 D	27.123	1444.5
88.8	88.95	33.720 E	-0.933 D	27.141	1444.7
89.8	90.00	33.743 E	-0.909 D	27.159	1444.8
90.8	90.90	33.760 E	-0.900 D	27.173	1444.9
91.8	92.05	33.765 E	-0.897 D	27.177	1444.9
92.8	92.95	33.769 E	-0.896 D	27.180	1445.0
93.8	94.10	33.772 E	-0.895 D	27.182	1445.0
94.8	94.95	33.772 E	-0.892 D	27.182	1445.0
95.8	96.00	33.779 E	-0.888 D	27.137	1445.1
96.8	97.05	33.783 E	-0.887 D	27.191	1445.1
97.8	98.10	33.788 E	-0.884 D	27.194	1445.1
98.8	99.20	33.808 E	-0.882 D	27.211	1445.2
99.8	100.20	33.824 D	-0.888 C	27.224	1445.2
100.8	101.25	33.840 D	-0.849 C	27.235	1445.4
101.8	102.10	33.857 D	-0.843 C	27.249	1445.5
102.8	103.15	33.863 D	-0.815 C	27.253	1445.6
103.8	104.30	33.874 D	-0.821 C	27.262	1445.6
104.8	105.25	33.878 D	-0.823 C	27.265	1445.7
105.8	106.25	33.893 D	-0.807 C	27.277	1445.8
106.8	107.30	33.894 D	-0.786 C	27.277	1445.9
107.8	108.15	33.910 D	-0.759 C	27.288	1446.0
108.8	109.30	33.924 D	-0.753 C	27.300	1446.1
109.8	110.25	33.931 D	-0.748 C	27.305	1446.2
110.8	111.20	33.938 D	-0.744 C	27.310	1446.2
111.8	112.40	33.944 D	-0.736 C	27.315	1446.3
112.8	113.35	33.951 D	-0.729 C	27.321	1446.3
113.8	114.50	33.960 D	-0.724 C	27.327	1446.4
114.8	115.40	33.968 D	-0.720 C	27.334	1446.4
115.8	116.40	33.972 D	-0.717 C	27.338	1446.5
116.8	117.45	33.972 D	-0.716 C	27.337	1446.5
117.8	118.40	33.979 D	-0.707 C	27.342	1446.5
118.8	119.45	33.987 D	-0.693 C	27.349	1446.6
119.8	120.45	33.994 D	-0.694 C	27.354	1446.7
120.8	121.60	34.000 D	-0.691 C	27.359	1446.7
121.8	122.50	34.006 D	-0.687 C	27.364	1446.7
122.8	123.50	34.011 D	-0.681 C	27.367	1446.8
123.8	124.60	34.023 D	-0.678 C	27.376	1446.8
124.8	125.55	34.030 D	-0.680 C	27.383	1446.9
125.8	126.65	34.031 D	-0.666 C	27.333	1446.9
126.8	127.60	34.042 D	-0.663 C	27.391	1447.0
127.8	128.55	34.045 D	-0.670 C	27.394	1447.0
128.8	129.60	34.047 D	-0.666 C	27.396	1447.0
129.8	130.65	34.049 D	-0.661 C	27.397	1447.1
130.8	131.60	34.055 D	-0.660 C	27.402	1447.1
131.8	132.65	34.053 D	-0.647 C	27.399	1447.2
132.8	133.80	34.066 D	-0.642 C	27.411	1447.2
133.8	134.70	34.075 D	-0.638 C	27.417	1447.3

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
134.8	135.75	34.085 D	-0.627 C	27.425	1447.4
135.8	136.75	34.092 D	-0.630 C	27.431	1447.4
136.8	137.90	34.093 D	-0.615 C	27.431	1447.5
137.8	138.80	34.100 D	-0.605 C	27.436	1447.5
138.8	139.80	34.110 D	-0.604 C	27.444	1447.6
139.8	140.90	34.119 D	-0.595 C	27.451	1447.6
140.8	141.80	34.127 D	-0.592 C	27.458	1447.7
141.8	142.75	34.133 D	-0.587 C	27.462	1447.7
142.8	144.00	34.141 D	-0.580 C	27.469	1447.8
143.8	144.95	34.144 D	-0.574 C	27.471	1447.8
144.8	145.95	34.154 D	-0.567 C	27.479	1447.9
145.8	146.90	34.165 D	-0.556 C	27.486	1448.0
146.8	148.00	34.176 D	-0.550 C	27.495	1448.0
147.8	148.85	34.184 D	-0.543 C	27.501	1448.1
148.8	150.05	34.189 D	-0.536 C	27.506	1448.2
149.8	151.05	34.197 D	-0.532 C	27.512	1448.2
150.8	151.95	34.205 D	-0.525 C	27.518	1448.3
151.8	153.05	34.211 D	-0.517 C	27.522	1448.3
152.8	153.95	34.216 D	-0.512 C	27.526	1448.4
153.8	155.10	34.222 D	-0.505 C	27.531	1448.4
154.8	155.05	34.231 D	-0.495 C	27.537	1448.5
155.8	157.10	34.244 D	-0.486 C	27.548	1448.6
156.8	158.15	34.252 D	-0.475 C	27.553	1448.7
157.8	159.10	34.257 D	-0.469 C	27.558	1448.7
158.8	160.25	34.269 D	-0.466 C	27.567	1448.8
159.8	161.10	34.271 D	-0.462 C	27.569	1448.8
160.8	162.20	34.273 D	-0.458 C	27.570	1448.8
161.8	163.35	34.282 D	-0.452 C	27.577	1448.9
162.8	164.10	34.287 D	-0.438 C	27.580	1449.0
163.8	165.25	34.301 D	-0.427 C	27.591	1449.1
164.8	166.35	34.312 D	-0.418 C	27.600	1449.1
165.8	167.40	34.324 D	-0.415 C	27.609	1449.2
166.8	168.25	34.331 D	-0.418 C	27.615	1449.2
167.8	169.40	34.335 D	-0.413 C	27.618	1449.2
168.8	170.25	34.334 D	-0.395 C	27.617	1449.3
169.8	171.40	34.344 D	-0.377 C	27.623	1449.5
170.8	172.40	34.350 D	-0.372 C	27.628	1449.5
171.8	173.30	34.354 D	-0.367 C	27.631	1449.5
172.8	174.30	34.360 D	-0.362 C	27.635	1449.6
173.8	175.55	34.371 D	-0.356 C	27.644	1449.7
174.8	176.60	34.381 D	-0.353 C	27.652	1449.7
175.8	177.55	34.380 D	-0.345 C	27.651	1449.8
176.8	178.50	34.387 D	-0.341 C	27.656	1449.8
177.8	179.55	34.392 D	-0.326 C	27.660	1449.9
178.8	180.40	34.402 D	-0.315 C	27.668	1450.0
179.8	181.45	34.410 D	-0.314 C	27.674	1450.0
180.8	182.55	34.414 D	-0.327 C	27.678	1450.0
181.8	183.55	34.423 D	-0.316 C	27.684	1450.0
182.8	184.55	34.430 D	-0.305 C	27.690	1450.1
183.8	185.55	34.436 D	-0.299 C	27.694	1450.2
184.8	186.65	34.436 D	-0.271 C	27.693	1450.3
185.8	187.65	34.448 D	-0.264 C	27.702	1450.4
186.8	188.65	34.455 D	-0.257 C	27.708	1450.4
187.8	189.65	34.463 D	-0.264 C	27.714	1450.4
188.8	190.70	34.467 D	-0.258 C	27.717	1450.5
189.8	191.75	34.469 D	-0.248 C	27.719	1450.6
190.8	192.90	34.477 D	-0.219 C	27.724	1450.7
191.8	193.80	34.487 D	-0.224 C	27.732	1450.7
192.8	194.70	34.491 D	-0.221 C	27.735	1450.8
193.8	195.95	34.496 D	-0.218 C	27.739	1450.8
194.8	196.80	34.496 D	-0.205 C	27.738	1450.9
195.8	197.90	34.508 D	-0.188 C	27.747	1451.0
196.8	198.75	34.517 D	-0.181 C	27.754	1451.0
197.8	199.90	34.520 D	-0.173 C	27.756	1451.1
198.8	201.00	34.527 D	-0.165 C	27.762	1451.2
199.8	201.90	34.531 D	-0.157 C	27.764	1451.2
200.8	202.95	34.540 D	-0.149 C	27.771	1451.3
201.8	203.95	34.543 D	-0.142 C	27.773	1451.3
202.8	204.85	34.550 D	-0.133 C	27.779	1451.4



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
203.8	205.95	34.553 D	-0.135 C	27.781	1451.4
204.8	207.10	34.556 D	-0.134 C	27.783	1451.5
205.8	208.05	34.557 D	-0.132 C	27.784	1451.5
206.8	209.10	34.561 D	-0.126 C	27.787	1451.5
207.8	210.00	34.566 D	-0.119 C	27.790	1451.6
208.8	211.00	34.573 D	-0.113 C	27.796	1451.6
209.8	212.10	34.577 D	-0.103 C	27.798	1451.7
210.8	213.10	34.582 D	-0.093 C	27.802	1451.8
211.8	214.20	34.588 D	-0.085 C	27.806	1451.8
212.8	215.15	34.593 D	-0.079 C	27.811	1451.9
213.8	216.10	34.597 D	-0.073 C	27.814	1451.9
214.8	217.10	34.601 D	-0.068 C	27.816	1452.0
215.8	218.20	34.606 D	-0.063 C	27.820	1452.0
216.8	219.30	34.610 D	-0.057 C	27.823	1452.1
217.8	220.25	34.611 D	-0.053 C	27.824	1452.1
218.8	221.30	34.615 D	-0.050 C	27.827	1452.2
219.8	222.25	34.621 D	-0.043 C	27.831	1452.2
220.8	223.25	34.623 D	-0.039 C	27.833	1452.2
221.8	224.30	34.629 D	-0.033 C	27.837	1452.3
222.8	225.45	34.635 D	-0.030 C	27.841	1452.3
223.8	226.45	34.635 D	-0.026 C	27.842	1452.4
224.8	227.35	34.637 D	-0.021 C	27.843	1452.4
225.8	228.30	34.642 D	-0.018 C	27.847	1452.5
226.8	229.45	34.645 D	-0.016 C	27.849	1452.5
227.8	230.35	34.646 D	-0.012 C	27.849	1452.5
228.8	231.40	34.650 D	-0.009 C	27.853	1452.6
229.8	232.50	34.653 D	-0.007 C	27.855	1452.6
230.8	233.60	34.656 D	-0.005 C	27.857	1452.6
231.8	234.50	34.659 D	0.0 C	27.860	1452.7
232.8	235.40	34.657 D	0.009 C	27.858	1452.7
233.8	236.50	34.661 D	0.011 C	27.861	1452.7
234.8	237.50	34.665 D	0.012 C	27.864	1452.8
235.8	238.60	34.663 D	0.021 C	27.862	1452.8
236.8	239.50	34.664 D	0.026 C	27.862	1452.9
237.8	240.60	34.670 D	0.030 C	27.867	1452.9
238.8	241.50	34.676 D	0.035 C	27.871	1453.0
239.8	242.65	34.676 D	0.039 C	27.871	1453.0
240.8	243.70	34.680 D	0.044 C	27.874	1453.0
241.8	244.80	34.684 D	0.045 C	27.877	1453.1
242.8	245.65	34.687 D	0.050 C	27.880	1453.1
243.8	246.60	34.690 D	0.052 C	27.882	1453.1
244.8	247.80	34.690 D	0.054 C	27.882	1453.2
245.8	248.80	34.693 D	0.055 C	27.884	1453.2
246.8	249.85	34.695 D	0.059 C	27.885	1453.2
247.8	250.85	34.696 D	0.061 C	27.886	1453.3
248.8	251.80	34.698 D	0.063 C	27.887	1453.3
249.8	252.95	34.699 D	0.066 C	27.889	1453.3
250.8	253.85	34.702 D	0.067 C	27.891	1453.3
251.8	254.95	34.705 D	0.071 C	27.893	1453.4
252.8	255.75	34.704 D	0.075 C	27.892	1453.4
253.8	256.90	34.711 D	0.079 C	27.897	1453.5
254.8	258.00	34.712 D	0.081 C	27.898	1453.5
255.8	259.00	34.715 D	0.083 C	27.900	1453.5
256.8	260.05	34.716 D	0.086 C	27.901	1453.6
257.8	260.80	34.718 D	0.088 C	27.903	1453.6
258.8	262.00	34.720 D	0.093 C	27.904	1453.6
259.8	263.05	34.724 D	0.095 C	27.907	1453.7
260.8	264.10	34.727 D	0.097 C	27.910	1453.7
261.8	265.00	34.731 D	0.102 C	27.912	1453.7
262.8	265.95	34.734 D	0.105 C	27.915	1453.8
263.8	267.15	34.734 D	0.108 C	27.915	1453.8
264.8	268.15	34.739 D	0.111 C	27.918	1453.8
265.8	269.15	34.743 D	0.114 C	27.922	1453.9
266.8	270.05	34.743 D	0.118 C	27.921	1453.9
267.8	271.25	34.744 D	0.120 C	27.922	1453.9
268.8	272.05	34.750 D	0.122 C	27.926	1454.0
269.8	273.20	34.749 D	0.127 C	27.926	1454.0
270.8	274.15	34.753 D	0.129 C	27.929	1454.0
271.8	275.35	34.755 D	0.134 C	27.930	1454.1



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
272.8	276.25	34.759 D	0.137 C	27.933	1454.1
273.8	277.25	34.759 D	0.137 C	27.933	1454.1
274.8	278.30	34.762 D	0.138 C	27.935	1454.2
275.8	279.35	34.762 D	0.139 C	27.935	1454.2
276.8	280.20	34.761 D	0.140 C	27.935	1454.2
277.8	281.35	34.764 D	0.142 C	27.937	1454.2
278.8	282.35	34.767 D	0.144 C	27.939	1454.3
279.8	283.35	34.766 D	0.147 C	27.938	1454.3
280.8	284.50	34.771 D	0.146 C	27.942	1454.3
281.8	285.45	34.771 D	0.148 C	27.942	1454.3
282.8	286.50	34.770 D	0.150 C	27.942	1454.4
283.8	287.45	34.774 D	0.150 C	27.945	1454.4
284.8	288.55	34.776 D	0.152 C	27.946	1454.4
285.8	289.50	34.777 D	0.154 C	27.947	1454.4
286.8	290.35	34.777 D	0.157 C	27.947	1454.5
287.8	291.55	34.780 D	0.158 C	27.949	1454.5
288.8	292.55	34.782 D	0.159 C	27.951	1454.5
289.8	293.60	34.782 D	0.161 C	27.951	1454.5
290.8	294.65	34.783 D	0.162 C	27.951	1454.6
291.8	295.65	34.785 D	0.165 C	27.953	1454.6
292.8	296.70	34.786 D	0.166 C	27.953	1454.6
293.8	297.65	34.789 D	0.167 C	27.955	1454.6
294.8	298.60	34.791 D	0.168 C	27.957	1454.7
295.8	299.70	34.792 D	0.168 C	27.958	1454.7
296.8	300.60	34.791 D	0.170 C	27.957	1454.7
297.8	301.80	34.791 D	0.169 C	27.957	1454.7
298.8	302.65	34.792 D	0.169 C	27.958	1454.7
299.8	303.75	34.793 D	0.170 C	27.959	1454.8
300.8	304.65	34.795 D	0.170 C	27.961	1454.8
301.8	305.95	34.794 D	0.173 C	27.959	1454.8
302.8	306.75	34.796 D	0.175 C	27.961	1454.8
303.8	307.75	34.798 D	0.175 C	27.962	1454.9
304.8	308.90	34.800 D	0.175 C	27.964	1454.9
305.8	309.90	34.800 D	0.177 C	27.964	1454.9
306.8	310.90	34.800 D	0.178 C	27.964	1454.9
307.8	311.90	34.801 D	0.179 C	27.965	1454.9
308.8	312.80	34.802 D	0.181 C	27.966	1455.0
309.8	313.95	34.805 D	0.182 C	27.968	1455.0
310.8	314.95	34.805 D	0.181 C	27.968	1455.0
311.8	316.00	34.805 D	0.181 C	27.968	1455.0
312.8	317.05	34.806 D	0.182 C	27.968	1455.1
313.8	318.05	34.805 D	0.185 C	27.967	1455.1
314.8	319.10	34.807 D	0.186 C	27.969	1455.1
315.8	319.90	34.807 D	0.183 C	27.969	1455.1
316.8	321.05	34.808 D	0.188 C	27.970	1455.1
317.8	322.10	34.809 D	0.190 C	27.971	1455.2
318.8	323.20	34.813 D	0.189 C	27.974	1455.2
319.8	324.05	34.814 D	0.189 C	27.974	1455.2
320.8	325.05	34.812 D	0.191 C	27.973	1455.2
321.8	326.20	34.813 D	0.192 C	27.974	1455.3
322.8	327.25	34.814 D	0.191 C	27.974	1455.3
323.8	328.05	34.814 D	0.192 C	27.974	1455.3
324.8	329.15	34.814 D	0.192 C	27.975	1455.3
325.8	330.25	34.815 D	0.193 C	27.976	1455.3
326.8	331.10	34.817 D	0.194 C	27.976	1455.4
327.8	332.25	34.818 D	0.195 C	27.977	1455.4
328.8	333.35	34.819 D	0.196 C	27.978	1455.4
329.8	334.30	34.820 D	0.197 C	27.979	1455.4
330.8	335.20	34.821 D	0.198 C	27.980	1455.4
331.8	336.45	34.824 D	0.197 C	27.982	1455.5
332.8	337.35	34.821 D	0.199 C	27.980	1455.5
333.8	338.25	34.821 D	0.200 C	27.980	1455.5
334.8	339.40	34.821 D	0.206 C	27.979	1455.5
335.8	340.30	34.823 D	0.212 C	27.981	1455.6
336.8	341.45	34.826 D	0.217 C	27.982	1455.6
337.8	342.50	34.828 D	0.209 C	27.985	1455.6
338.8	343.50	34.829 D	0.205 C	27.986	1455.6
339.8	344.65	34.830 D	0.203 C	27.986	1455.6
340.8	345.40	34.828 D	0.203 C	27.985	1455.6

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
341.8	346.40	34.828 D	0.205 C	27.985	1455.7
342.8	347.55	34.829 D	0.206 C	27.986	1455.7
343.8	348.60	34.828 D	0.206 C	27.985	1455.7
344.8	349.65	34.830 D	0.206 C	27.987	1455.7
345.8	350.50	34.828 D	0.210 C	27.985	1455.8
346.8	351.60	34.831 D	0.217 C	27.987	1455.8
347.8	352.65	34.831 D	0.219 C	27.987	1455.8
348.8	353.65	34.833 D	0.219 C	27.988	1455.9
349.8	354.60	34.834 D	0.223 C	27.989	1455.9
350.8	355.55	34.832 D	0.225 C	27.987	1455.9
351.8	356.75	34.834 D	0.225 C	27.989	1455.9
352.8	357.65	34.834 D	0.226 C	27.989	1456.0
353.8	358.70	34.835 D	0.227 C	27.990	1456.0
354.8	359.75	34.837 D	0.226 C	27.991	1456.0
355.8	360.70	34.837 D	0.227 C	27.991	1456.0
356.8	361.75	34.838 D	0.227 C	27.992	1456.0
357.8	362.85	34.838 D	0.226 C	27.992	1456.0
358.8	363.90	34.839 D	0.225 C	27.993	1456.1
359.8	364.80	34.836 D	0.227 C	27.990	1456.1
360.8	365.75	34.837 D	0.227 C	27.991	1456.1
361.8	366.80	34.837 D	0.230 C	27.991	1456.1
362.8	367.90	34.835 D	0.229 C	27.993	1456.1
363.8	368.95	34.840 D	0.230 C	27.993	1456.2
364.8	369.80	34.840 D	0.231 C	27.993	1456.2
365.8	371.00	34.842 D	0.230 C	27.995	1456.2
366.8	372.00	34.843 D	0.230 C	27.995	1456.2
367.8	372.85	34.841 D	0.231 C	27.994	1456.2
368.8	374.00	34.842 D	0.231 C	27.995	1456.3
369.8	374.95	34.842 D	0.233 C	27.995	1456.3
370.8	376.00	34.842 D	0.233 C	27.995	1456.3
371.8	377.20	34.845 D	0.231 C	27.998	1456.3
372.8	378.10	34.843 D	0.234 C	27.996	1456.3
373.8	379.05	34.845 D	0.233 C	27.997	1456.4
374.8	380.10	34.845 D	0.232 C	27.998	1456.4
375.8	381.10	34.845 D	0.232 C	27.997	1456.4
376.8	382.10	34.843 D	0.234 C	27.996	1456.4
377.8	383.20	34.844 D	0.234 C	27.997	1456.4
378.8	384.15	34.844 D	0.234 C	27.996	1456.4
379.8	385.25	34.846 D	0.233 C	27.998	1456.5
380.8	386.20	34.845 D	0.234 C	27.997	1456.5
381.8	387.15	34.846 D	0.234 C	27.998	1456.5
382.8	388.20	34.847 D	0.234 C	27.999	1456.5
383.8	389.45	34.846 D	0.234 C	27.998	1456.5
384.8	390.30	34.847 D	0.234 C	27.999	1456.5
385.8	391.45	34.847 D	0.234 C	27.998	1456.6
386.8	392.30	34.849 D	0.233 C	28.000	1456.6
387.8	393.40	34.847 D	0.235 C	27.999	1456.6
388.8	394.25	34.850 D	0.233 C	28.001	1456.6
389.8	395.25	34.849 D	0.234 C	28.000	1456.6
390.8	396.30	34.849 D	0.234 C	28.001	1456.6
391.8	397.30	34.850 D	0.234 C	28.001	1456.7
392.8	398.45	34.848 D	0.235 C	28.000	1456.7
393.8	399.55	34.849 D	0.235 C	28.001	1456.7
394.8	400.35	34.852 D	0.233 C	28.003	1456.7
395.8	401.50	34.852 D	0.233 C	28.003	1456.7
396.8	402.45	34.849 D	0.234 C	28.000	1456.7
397.8	403.40	34.852 D	0.233 C	28.003	1456.8
398.8	404.55	34.853 D	0.234 C	28.004	1456.8
399.8	405.60	34.854 D	0.234 C	28.004	1456.8
400.8	406.60	34.850 D	0.237 C	28.001	1456.8
401.8	407.65	34.852 D	0.237 C	28.003	1456.9
402.8	408.60	34.852 D	0.238 C	28.002	1456.9
403.8	409.70	34.854 D	0.237 C	28.004	1456.9
404.8	410.75	34.853 D	0.237 C	28.004	1456.9
405.8	411.80	34.854 D	0.237 C	28.004	1456.9
406.8	412.75	34.855 D	0.238 C	28.005	1456.9
407.8	413.75	34.855 D	0.239 C	28.005	1457.0
408.8	414.55	34.858 D	0.237 C	28.008	1457.0
409.8	415.35	34.856 D	0.238 C	28.006	1457.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
410.8	416.40	34.855 D	0.240 C	28.005	1457.0
411.8	417.55	34.855 D	0.239 C	28.005	1457.0
412.8	418.60	34.857 D	0.237 C	28.007	1457.0
413.8	419.60	34.857 D	0.239 C	28.007	1457.1
414.8	420.60	34.859 D	0.238 C	28.008	1457.1
415.8	421.50	34.858 D	0.240 C	28.007	1457.1
416.8	422.55	34.860 D	0.239 C	28.009	1457.1
417.8	423.75	34.858 D	0.240 C	28.007	1457.1
418.8	424.80	34.860 D	0.239 C	28.009	1457.2
419.8	425.75	34.857 D	0.241 C	28.006	1457.2
420.8	426.60	34.860 D	0.239 C	28.009	1457.2
421.8	427.70	34.860 D	0.240 C	28.009	1457.2
422.8	428.85	34.860 D	0.239 C	28.009	1457.2
423.8	429.85	34.858 D	0.240 C	28.008	1457.2
424.8	430.80	34.860 D	0.238 C	28.009	1457.2
425.8	431.65	34.861 D	0.238 C	28.010	1457.3
426.8	432.95	34.862 D	0.238 C	28.010	1457.3
427.8	433.95	34.860 D	0.240 C	28.009	1457.3
428.8	434.85	34.861 D	0.239 C	28.010	1457.3
429.8	436.00	34.861 D	0.238 C	28.010	1457.3
430.8	436.95	34.860 D	0.240 C	28.009	1457.4
431.8	437.95	34.862 D	0.239 C	28.011	1457.4
432.8	438.90	34.861 D	0.239 C	28.010	1457.4
433.8	439.95	34.861 D	0.240 C	28.010	1457.4
434.8	440.85	34.863 D	0.239 C	28.011	1457.4
435.8	441.95	34.861 D	0.239 C	28.010	1457.4
436.8	443.00	34.863 D	0.239 C	28.012	1457.5
437.8	444.00	34.861 D	0.240 C	28.010	1457.5
438.8	445.15	34.861 D	0.240 C	28.010	1457.5
439.8	446.15	34.863 D	0.239 C	28.011	1457.5
440.8	447.10	34.863 D	0.238 C	28.012	1457.5
441.8	448.10	34.863 D	0.237 C	28.011	1457.5
442.8	449.10	34.864 D	0.236 C	28.013	1457.5
443.8	450.20	34.864 D	0.235 C	28.012	1457.6
444.8	451.20	34.866 D	0.235 C	28.014	1457.6
445.8	452.20	34.863 D	0.238 C	28.012	1457.6
446.8	453.20	34.865 D	0.236 C	28.013	1457.6
447.8	454.25	34.864 D	0.236 C	28.013	1457.6
448.8	455.25	34.865 D	0.236 C	28.013	1457.6
449.8	456.35	34.863 D	0.237 C	28.012	1457.7
450.8	457.95	34.864 D	0.236 C	28.012	1457.7
451.8	459.10	34.864 D	0.235 C	28.013	1457.7
452.8	460.00	34.864 D	0.235 C	28.012	1457.7
453.8	461.05	34.864 D	0.235 C	28.013	1457.7
454.8	462.20	34.865 D	0.234 C	28.013	1457.8
455.8	463.15	34.865 D	0.236 C	28.013	1457.8
456.8	464.00	34.866 D	0.236 C	28.014	1457.8
457.8	465.10	34.865 D	0.236 C	28.013	1457.8
458.8	466.20	34.866 D	0.236 C	28.014	1457.8
459.8	467.25	34.864 D	0.236 C	28.012	1457.8
460.8	468.20	34.866 D	0.236 C	28.014	1457.9
461.8	469.10	34.866 D	0.236 C	28.014	1457.9
462.8	470.30	34.865 D	0.237 C	28.013	1457.9
463.8	471.35	34.866 D	0.236 C	28.014	1457.9
464.8	472.30	34.866 D	0.235 C	28.014	1457.9
465.8	473.25	34.865 D	0.236 C	28.013	1457.9
466.8	474.40	34.866 D	0.234 C	28.014	1458.0
467.8	475.20	34.867 D	0.235 C	28.015	1458.0
468.8	476.20	34.868 D	0.233 C	28.016	1458.0
469.8	477.45	34.868 D	0.233 C	28.016	1458.0
470.8	478.45	34.867 D	0.234 C	28.015	1458.0
471.8	479.35	34.869 D	0.234 C	28.017	1458.0
472.8	480.45	34.868 D	0.234 C	28.016	1458.1
473.8	481.40	34.868 D	0.234 C	28.016	1458.1
474.8	482.35	34.867 D	0.234 C	28.015	1458.1
475.8	483.50	34.867 C	0.235 C	28.015	1458.1
476.8	484.50	34.867 D	0.236 C	28.014	1458.1
477.8	485.55	34.866 D	0.235 C	28.014	1458.1
478.8	486.60	34.866 D	0.235 C	28.014	1458.2



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
479.8	487.60	34.870 D	0.233 C	28.017	1458.2
480.8	488.60	34.868 D	0.234 C	28.016	1458.2
481.8	489.60	34.869 D	0.234 C	28.016	1458.2
482.8	490.60	34.869 D	0.233 C	28.017	1458.2
483.8	491.70	34.869 D	0.234 C	28.016	1458.2
484.8	492.65	34.867 D	0.235 C	28.015	1458.3
485.8	493.60	34.868 D	0.234 C	28.016	1458.3
486.8	494.75	34.870 D	0.233 C	28.017	1458.3
487.8	495.60	34.869 D	0.234 C	28.017	1458.3
488.8	496.60	34.871 D	0.233 C	28.019	1458.3
489.8	497.65	34.871 D	0.233 C	28.018	1458.3
490.8	498.85	34.870 D	0.233 C	28.017	1458.4
491.8	499.60	34.870 D	0.233 C	28.017	1458.4
492.8	500.85	34.869 D	0.233 C	28.017	1458.4
493.8	501.80	34.869 D	0.234 C	28.016	1458.4
494.8	502.80	34.868 D	0.234 C	28.016	1458.4
495.8	503.85	34.869 D	0.234 C	28.016	1458.4
496.8	504.80	34.871 D	0.233 C	28.018	1458.5
497.8	505.90	34.868 D	0.234 C	28.015	1458.5
498.8	506.85	34.869 D	0.234 C	28.016	1458.5
499.8	508.00	34.870 D	0.233 C	28.018	1458.5
500.8	509.10	34.870 D	0.233 C	28.017	1458.5
501.8	510.00	34.871 D	0.233 C	28.018	1458.5
502.8	510.85	34.870 D	0.233 C	28.018	1458.6
503.8	511.95	34.868 D	0.234 C	28.016	1458.6
504.8	513.10	34.870 D	0.233 C	28.018	1458.6
505.8	514.00	34.870 D	0.234 C	28.017	1458.6
506.8	515.05	34.868 D	0.234 C	28.016	1458.6
507.8	515.95	34.871 D	0.233 C	28.019	1458.6
508.8	517.10	34.869 D	0.233 C	28.017	1458.7
509.8	518.05	34.869 D	0.234 C	28.017	1458.7
510.8	519.00	34.871 D	0.233 C	28.018	1458.7
511.8	520.05	34.870 D	0.233 C	28.018	1458.7
512.8	521.05	34.870 D	0.233 C	28.017	1458.7
513.8	522.25	34.868 D	0.234 C	28.016	1458.7
514.8	523.25	34.870 D	0.233 C	28.017	1458.8
515.8	524.25	34.870 D	0.234 C	28.017	1458.8
516.8	525.35	34.870 D	0.233 C	28.018	1458.8
517.8	526.35	34.871 D	0.233 C	28.018	1458.8
518.8	527.25	34.871 D	0.234 C	28.018	1458.8
519.8	528.30	34.870 D	0.234 C	28.018	1458.8
520.8	529.30	34.868 D	0.234 C	28.016	1458.9
521.8	530.30	34.870 D	0.234 C	28.018	1458.9
522.8	531.30	34.870 D	0.234 C	28.017	1458.9
523.8	532.25	34.871 D	0.234 C	28.018	1458.9
524.8	533.45	34.870 D	0.234 C	28.017	1458.9
525.8	534.30	34.871 D	0.234 C	28.018	1458.9
526.8	535.50	34.871 D	0.232 C	28.018	1459.0
527.8	536.40	34.872 D	0.232 C	28.019	1459.0
528.8	537.55	34.871 D	0.232 C	28.019	1459.0
529.8	538.50	34.872 D	0.232 C	28.019	1459.0
530.8	539.55	34.872 D	0.232 C	28.019	1459.0
531.8	540.55	34.871 D	0.233 C	28.018	1459.0
532.8	541.60	34.872 D	0.232 C	28.019	1459.1
533.8	542.55	34.873 D	0.232 C	28.020	1459.1
534.8	543.70	34.873 D	0.231 C	28.020	1459.1
535.8	544.55	34.873 D	0.232 C	28.020	1459.1
536.8	545.60	34.871 D	0.232 C	28.018	1459.1
537.8	546.55	34.872 D	0.232 C	28.019	1459.1
538.8	547.75	34.872 D	0.231 C	28.019	1459.2
539.8	548.60	34.871 D	0.232 C	28.018	1459.2
540.8	549.60	34.870 D	0.232 C	28.017	1459.2
541.8	550.65	34.871 D	0.233 C	28.018	1459.2
542.8	551.70	34.871 D	0.233 C	28.018	1459.2
543.8	552.80	34.871 D	0.233 C	28.018	1459.2
544.8	553.80	34.871 D	0.234 C	28.018	1459.3
545.8	554.75	34.873 D	0.232 C	28.020	1459.3
546.8	555.80	34.872 D	0.233 C	28.019	1459.3
547.8	556.65	34.873 D	0.233 C	28.020	1459.3

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
548.8	557.70	34.874 D	0.232 C	28.021	1459.3
549.8	558.90	34.873 D	0.232 C	28.020	1459.3
550.8	559.85	34.873 D	0.232 C	28.020	1459.4
551.8	560.75	34.870 D	0.234 C	28.017	1459.4
552.8	561.90	34.873 D	0.232 C	28.020	1459.4
553.8	562.90	34.873 D	0.231 C	28.020	1459.4
554.8	564.00	34.874 D	0.232 C	28.021	1459.4
555.8	564.85	34.874 D	0.231 C	28.020	1459.4
556.8	565.85	34.874 D	0.231 C	28.021	1459.5
557.8	567.00	34.874 D	0.231 C	28.021	1459.5
558.8	567.90	34.874 D	0.232 C	28.020	1459.5
559.8	568.90	34.875 D	0.230 C	28.022	1459.5
560.8	570.00	34.873 D	0.230 C	28.020	1459.5
561.8	571.00	34.874 D	0.230 C	28.021	1459.5
562.8	571.95	34.872 D	0.231 C	28.019	1459.6
563.8	573.00	34.875 D	0.229 C	28.022	1459.6
564.8	574.15	34.871 D	0.232 C	28.019	1459.6
565.8	575.15	34.873 D	0.231 C	28.020	1459.6
566.8	576.25	34.874 D	0.231 C	28.021	1459.6
567.8	577.00	34.876 D	0.229 C	28.022	1459.6
568.8	578.25	34.875 D	0.228 C	28.022	1459.7
569.8	579.30	34.876 D	0.228 C	28.022	1459.7
570.8	580.30	34.875 D	0.227 C	28.022	1459.7
571.8	581.25	34.874 D	0.227 C	28.021	1459.7
572.8	582.30	34.875 D	0.229 C	28.022	1459.7
573.8	583.35	34.874 D	0.229 C	28.021	1459.7
574.8	584.30	34.877 D	0.227 C	28.023	1459.7
575.8	585.40	34.875 D	0.227 C	28.021	1459.8
576.8	586.30	34.874 D	0.227 C	28.021	1459.8
577.8	587.25	34.875 D	0.227 C	28.022	1459.8
578.8	588.45	34.874 D	0.227 C	28.021	1459.8
579.8	589.40	34.876 D	0.226 C	28.023	1459.8
580.8	590.25	34.875 D	0.227 C	28.022	1459.8
581.8	591.40	34.874 D	0.228 C	28.021	1459.9
582.8	592.40	34.875 D	0.228 C	28.022	1459.9
583.8	593.30	34.876 D	0.227 C	28.022	1459.9
584.8	594.40	34.878 D	0.226 C	28.024	1459.9
585.8	595.60	34.877 D	0.226 C	28.023	1459.9
586.8	596.40	34.875 D	0.227 C	28.022	1459.9
587.8	597.50	34.876 D	0.226 C	28.023	1460.0
588.8	598.55	34.877 D	0.226 C	28.023	1460.0
589.8	599.45	34.876 D	0.226 C	28.023	1460.0
590.8	600.60	34.877 D	0.225 C	28.023	1460.0
591.8	601.70	34.877 D	0.224 C	28.024	1460.0
592.8	602.65	34.876 D	0.226 C	28.022	1460.0
593.8	603.65	34.875 D	0.226 C	28.022	1460.1
594.8	604.75	34.877 D	0.225 C	28.023	1460.1
595.8	605.65	34.877 D	0.225 C	28.023	1460.1
596.8	606.65	34.876 D	0.226 C	28.023	1460.1
597.8	607.80	34.878 D	0.224 C	28.024	1460.1
598.8	608.80	34.876 D	0.225 C	28.023	1460.1
599.8	609.70	34.877 D	0.224 C	28.023	1460.2
600.8	610.85	34.875 D	0.225 C	28.022	1460.2
601.8	611.80	34.877 D	0.224 C	28.023	1460.2
602.8	612.75	34.878 D	0.224 C	28.024	1460.2
603.8	613.75	34.877 D	0.223 C	28.024	1460.2
604.8	614.75	34.878 D	0.223 C	28.024	1460.2
605.8	615.85	34.879 D	0.223 C	28.025	1460.3
606.8	616.70	34.877 D	0.223 C	28.023	1460.3
607.8	617.90	34.876 D	0.224 C	28.023	1460.3
608.8	618.85	34.876 D	0.224 C	28.022	1460.3
609.8	619.80	34.877 D	0.224 C	28.023	1460.3
610.8	620.95	34.877 D	0.223 C	28.024	1460.3
611.8	622.05	34.877 D	0.224 C	28.023	1460.4
612.8	622.90	34.877 D	0.223 C	28.024	1460.4
613.8	624.10	34.878 D	0.223 C	28.024	1460.4
614.8	625.05	34.877 D	0.223 C	28.024	1460.4
615.8	626.00	34.878 D	0.223 C	28.025	1460.4
616.8	627.15	34.878 D	0.223 C	28.024	1460.4

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
617.8	628.00	34.876 D	0.224 C	28.023	1460.5
618.8	629.10	34.878 D	0.223 C	28.024	1460.5
619.8	630.15	34.876 D	0.224 C	28.023	1460.5
620.8	631.15	34.878 D	0.222 C	28.024	1460.5
621.8	632.20	34.876 D	0.223 C	28.023	1460.5
622.8	633.15	34.877 D	0.223 C	28.024	1460.5
623.8	634.05	34.878 D	0.223 C	28.024	1460.6
624.8	635.25	34.879 D	0.221 C	28.026	1460.6
625.8	636.10	34.879 D	0.222 C	28.025	1460.6
626.8	637.25	34.881 D	0.220 C	28.027	1460.6
627.8	638.25	34.878 D	0.223 C	28.025	1460.6
628.8	639.20	34.877 D	0.222 C	28.024	1460.6
629.8	640.35	34.880 D	0.220 C	28.027	1460.6
630.8	641.25	34.878 D	0.222 C	28.024	1460.7
631.8	642.20	34.879 D	0.220 C	28.026	1460.7
632.8	643.25	34.880 D	0.220 C	28.026	1460.7
633.8	644.45	34.879 D	0.220 C	28.026	1460.7
634.8	645.45	34.879 D	0.220 C	28.025	1460.7
635.8	646.40	34.877 D	0.222 C	28.024	1460.7
636.8	647.55	34.878 D	0.221 C	28.024	1460.8
637.8	648.50	34.879 D	0.220 C	28.025	1460.8
638.8	649.40	34.881 D	0.219 C	28.027	1460.8
639.8	650.55	34.881 D	0.218 C	28.027	1460.8
640.8	651.55	34.880 D	0.220 C	28.026	1460.8
641.8	652.40	34.879 D	0.220 C	28.025	1460.8
642.8	653.55	34.878 D	0.220 C	28.025	1460.9
643.8	654.45	34.880 D	0.219 C	28.027	1460.9
644.8	655.55	34.880 D	0.219 C	28.026	1460.9
645.8	656.55	34.881 D	0.219 C	28.027	1460.9
646.8	657.50	34.882 D	0.219 C	28.027	1460.9
647.8	658.60	34.878 D	0.220 C	28.025	1460.9
648.8	659.60	34.879 D	0.219 C	28.025	1461.0
649.8	660.50	34.877 D	0.220 C	28.024	1461.0
650.8	661.65	34.881 D	0.219 C	28.027	1461.0





EXPERIMENT 2027

148

TEMPERATURE, C

-2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00

SALINITY 0/00

24.00 26.00 28.00 30.00 32.00 34.00 36.00

SIGMAT

19.00 21.00 23.00 25.00 27.00 29.00 31.00

DEPTH M



CRUISE 15-76-015

GREELY FIORD-76

EXPER NO. 2027

LAT N.80-23-00

LONG W.86-00-00

WATER DEPTH 680

DEPTH INCR.

DATE 260376

LOCAL TIME 1813

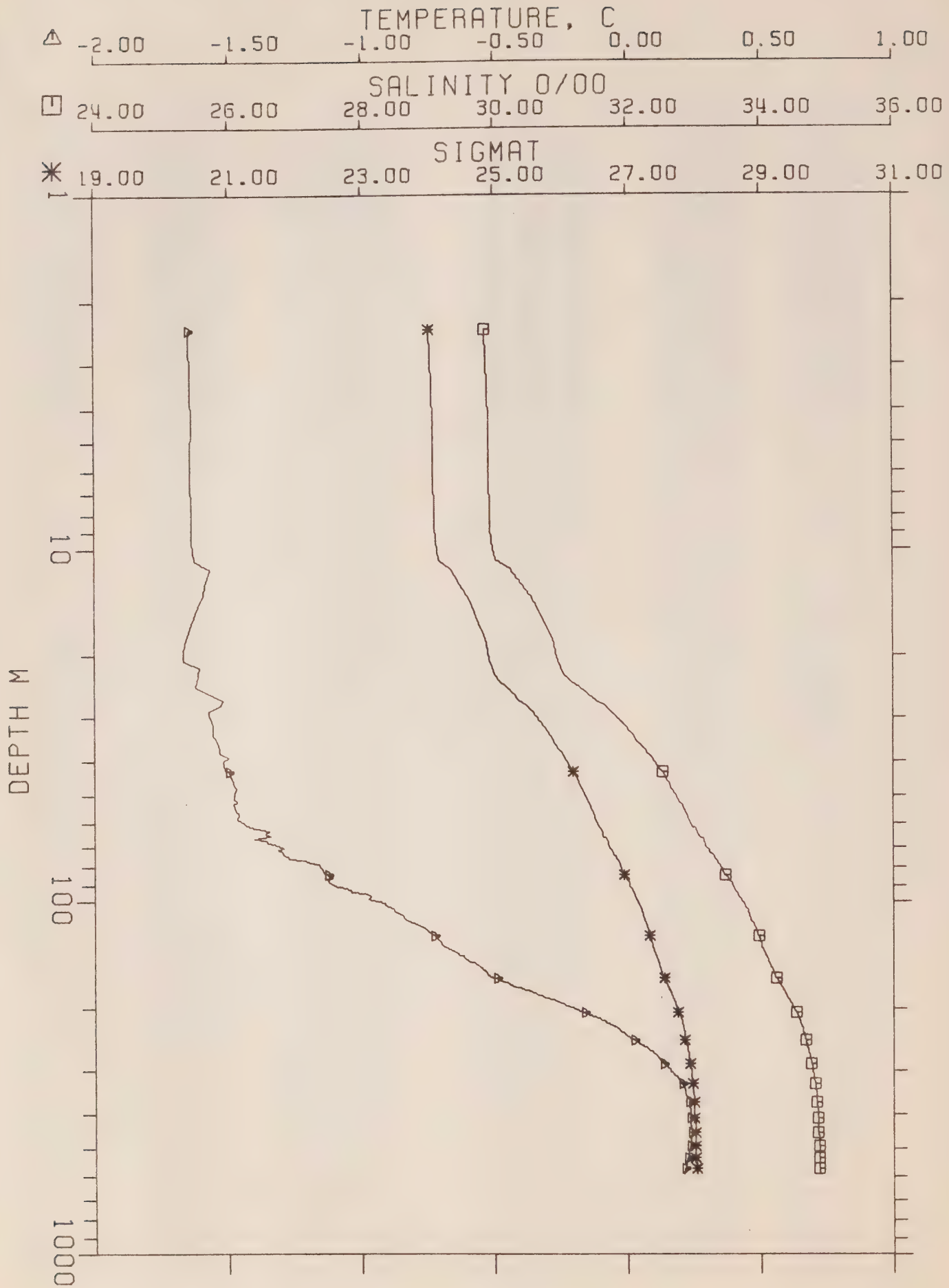
DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
3.0	1.50	29.944 E	-1.647 D	24.103	1434.6
4.0	2.40	29.939 E	-1.648 D	24.099	1434.6
5.0	3.35	29.935 E	-1.648 D	24.096	1434.6
6.0	4.50	29.934 E	-1.646 D	24.095	1434.6
7.0	5.50	29.937 E	-1.648 D	24.097	1434.6
8.0	6.45	29.937 E	-1.647 D	24.097	1434.6
9.0	7.70	30.007 E	-1.653 D	24.154	1434.7
10.0	8.45	30.174 E	-1.662 D	24.290	1434.9
11.0	9.55	30.229 E	-1.634 D	24.334	1435.1
12.0	10.75	30.299 E	-1.619 D	24.390	1435.3
13.0	11.60	30.345 E	-1.587 D	24.427	1435.6
14.0	12.50	30.411 E	-1.580 D	24.430	1435.7
15.0	13.60	30.471 E	-1.567 D	24.528	1435.9
16.0	14.70	30.513 E	-1.569 D	24.562	1435.9
17.0	15.65	30.560 E	-1.572 D	24.600	1436.0
18.0	16.70	30.607 E	-1.587 D	24.639	1436.0
19.0	17.70	30.642 E	-1.599 D	24.667	1436.0
20.0	18.70	30.682 E	-1.603 D	24.700	1436.1
21.0	19.75	30.714 E	-1.567 D	24.725	1436.3
22.0	20.80	30.774 E	-1.445 D	24.772	1437.0
23.0	21.60	30.827 E	-1.431 D	24.814	1437.1
24.0	22.75	30.911 E	-1.372 D	24.881	1437.6
25.0	23.80	30.957 E	-1.343 D	24.918	1437.8
26.0	24.85	31.040 E	-1.281 D	24.984	1438.2
27.0	25.70	31.111 E	-1.250 D	25.041	1438.5
28.0	26.75	31.211 E	-1.241 D	25.121	1438.7
29.0	27.95	31.300 E	-1.222 D	25.193	1438.9
30.0	28.95	31.391 E	-1.222 D	25.266	1439.0
31.0	29.95	31.452 E	-1.176 D	25.314	1439.4
32.0	30.90	31.534 E	-1.162 D	25.381	1439.6
33.0	31.90	31.605 E	-1.145 D	25.437	1439.8
34.0	32.95	31.702 E	-1.102 D	25.514	1440.1
35.0	34.00	31.826 E	-1.136 D	25.616	1440.1
36.0	34.90	31.902 E	-1.110 D	25.677	1440.4
37.0	35.90	32.011 E	-1.166 D	25.766	1440.3
38.0	36.85	32.047 E	-1.227 D	25.797	1440.1
39.0	37.85	32.094 E	-1.240 D	25.836	1440.1
40.0	38.85	32.154 E	-1.288 D	25.885	1440.0
41.0	39.90	32.202 E	-1.302 D	25.924	1440.0
42.0	41.00	32.256 E	-1.343 D	25.969	1439.9
43.0	42.15	32.271 E	-1.366 D	25.982	1439.8
44.0	43.15	32.305 E	-1.381 D	26.010	1439.8
45.0	44.20	32.364 E	-1.402 D	26.058	1439.8
46.0	45.20	32.455 E	-1.420 D	26.132	1439.9
47.0	46.15	32.514 E	-1.426 D	26.180	1439.9
48.0	47.05	32.539 E	-1.418 D	26.200	1440.0
49.0	48.05	32.571 E	-1.429 D	26.226	1440.0
50.0	49.10	32.598 E	-1.421 D	26.248	1440.1
51.0	50.05	32.640 E	-1.427 D	26.282	1440.2
52.0	51.15	32.688 E	-1.424 D	26.321	1440.3
53.0	52.25	32.703 E	-1.424 D	26.333	1440.3
54.0	53.30	32.759 E	-1.418 D	26.379	1440.4
55.0	54.35	32.816 E	-1.414 D	26.425	1440.6
56.0	55.30	32.866 E	-1.406 D	26.465	1440.7
57.0	56.30	32.917 E	-1.399 D	26.505	1440.8
58.0	57.35	32.960 E	-1.388 D	26.540	1440.9
59.0	58.25	33.014 E	-1.368 D	26.584	1441.1
60.0	59.40	33.062 E	-1.349 D	26.622	1441.3
61.0	60.45	33.113 E	-1.329 D	26.662	1441.5
62.0	61.30	33.158 E	-1.305 D	26.698	1441.7
63.0	62.30	33.194 E	-1.298 D	26.727	1441.8
64.0	63.40	33.211 E	-1.283 D	26.740	1441.9



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
65.0	64.40	33.262 E	-1.257 D	26.781	1442.1
66.0	65.50	33.296 E	-1.240 D	26.808	1442.2
67.0	66.60	33.320 E	-1.227 D	26.827	1442.3
68.0	67.45	33.359 E	-1.211 D	26.859	1442.5
69.0	68.45	33.378 E	-1.197 D	26.874	1442.6
70.0	69.60	33.413 E	-1.184 D	26.901	1442.7
71.0	70.50	33.438 E	-1.167 D	26.921	1442.9
72.0	71.55	33.453 E	-1.152 D	26.932	1443.0
73.0	72.60	33.469 E	-1.137 D	26.945	1443.1
74.0	73.70	33.494 E	-1.127 D	26.965	1443.2
75.0	74.55	33.514 E	-1.103 D	26.930	1443.3
76.0	75.70	33.546 E	-1.089 D	27.006	1443.5
77.0	76.55	33.567 E	-1.068 D	27.023	1443.6
78.0	77.80	33.586 E	-1.059 D	27.037	1443.7
79.0	78.70	33.601 E	-1.045 D	27.049	1443.8
80.0	79.80	33.619 E	-1.031 D	27.063	1443.9
81.0	80.60	33.634 E	-1.017 D	27.075	1444.0
82.0	81.80	33.644 E	-1.004 D	27.082	1444.1
83.0	82.70	33.657 E	-0.995 D	27.092	1444.2
84.0	83.85	33.674 E	-0.984 D	27.106	1444.3
85.0	84.90	33.683 E	-0.977 D	27.113	1444.3
86.0	85.75	33.690 E	-0.969 D	27.118	1444.4
87.0	86.90	33.704 E	-0.956 D	27.129	1444.5
88.0	87.75	33.712 E	-0.943 D	27.136	1444.6
89.0	88.95	33.737 E	-0.920 D	27.155	1444.7
90.0	89.90	33.750 E	-0.910 D	27.165	1444.8
91.0	90.95	33.760 E	-0.902 D	27.172	1444.9
92.0	91.80	33.764 E	-0.897 D	27.175	1444.9
93.0	92.95	33.765 E	-0.894 D	27.177	1445.0
94.0	94.00	33.772 E	-0.894 D	27.182	1445.0
95.0	94.90	33.776 E	-0.890 D	27.185	1445.0
96.0	95.85	33.781 E	-0.887 D	27.189	1445.1
97.0	97.00	33.790 E	-0.882 D	27.197	1445.1
98.0	98.05	33.798 E	-0.883 D	27.203	1445.1
99.0	98.95	33.812 E	-0.889 D	27.214	1445.1
100.0	99.95	33.828 E	-0.877 D	27.227	1445.2
101.0	101.05	33.837 D	-0.863 C	27.233	1445.3
102.0	102.10	33.846 D	-0.851 C	27.240	1445.4
103.0	103.30	33.849 D	-0.823 C	27.242	1445.6
104.0	104.15	33.877 D	-0.821 C	27.264	1445.6
105.0	105.20	33.886 D	-0.803 C	27.271	1445.7
106.0	106.15	33.896 D	-0.798 C	27.279	1445.8
107.0	107.10	33.907 D	-0.763 C	27.287	1446.0
108.0	108.30	33.917 D	-0.758 C	27.294	1446.1
109.0	109.25	33.924 D	-0.753 C	27.300	1446.1
110.0	110.35	33.934 D	-0.747 C	27.308	1446.2
111.0	111.25	33.942 D	-0.738 C	27.314	1446.2
112.0	112.35	33.952 D	-0.729 C	27.321	1446.3
113.0	113.25	33.958 D	-0.726 C	27.326	1446.3
114.0	114.35	33.962 D	-0.720 C	27.330	1446.4
115.0	115.40	33.969 D	-0.717 C	27.334	1446.4
116.0	116.45	33.975 D	-0.714 C	27.339	1446.5
117.0	117.30	33.978 D	-0.711 C	27.342	1446.5
118.0	118.40	33.984 D	-0.704 C	27.347	1446.6
119.0	119.55	33.991 D	-0.700 C	27.352	1446.6
120.0	120.50	33.993 D	-0.695 C	27.354	1446.7
121.0	121.45	34.004 D	-0.686 C	27.362	1446.7
122.0	122.40	34.010 D	-0.680 C	27.367	1446.8
123.0	123.25	34.017 D	-0.671 C	27.372	1446.8
124.0	124.30	34.027 D	-0.675 C	27.380	1446.9
125.0	125.20	34.032 D	-0.680 C	27.384	1446.9
126.0	126.40	34.039 D	-0.665 C	27.389	1447.0
127.0	127.35	34.045 D	-0.667 C	27.394	1447.0
128.0	128.40	34.048 D	-0.663 C	27.397	1447.0
129.0	129.35	34.055 D	-0.649 C	27.402	1447.1
130.0	130.45	34.062 D	-0.648 C	27.407	1447.1
131.0	131.45	34.066 D	-0.644 C	27.410	1447.2
132.0	132.50	34.070 D	-0.639 C	27.413	1447.2
133.0	133.50	34.077 D	-0.637 C	27.419	1447.3

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
134.0	134.50	34.080 D	-0.634 C	27.421	1447.3
135.0	135.50	34.087 D	-0.630 C	27.426	1447.3
136.0	136.30	34.093 D	-0.624 C	27.431	1447.4
137.0	137.40	34.103 D	-0.612 C	27.439	1447.5
138.0	138.40	34.114 D	-0.603 C	27.447	1447.5
139.0	139.25	34.122 D	-0.598 C	27.454	1447.6
140.0	140.25	34.130 D	-0.591 C	27.460	1447.7
141.0	141.30	34.138 D	-0.586 C	27.466	1447.7
142.0	142.40	34.146 D	-0.577 C	27.472	1447.8
143.0	143.35	34.151 D	-0.575 C	27.476	1447.8
144.0	144.40	34.154 D	-0.570 C	27.479	1447.9
145.0	145.60	34.158 D	-0.567 C	27.481	1447.9
146.0	146.40	34.165 D	-0.559 C	27.487	1448.0
147.0	147.35	34.173 D	-0.552 C	27.493	1448.0
148.0	148.55	34.182 D	-0.544 C	27.500	1448.1
149.0	149.55	34.187 D	-0.539 C	27.504	1448.1
150.0	150.55	34.195 D	-0.531 C	27.510	1448.2

EXPERIMENT 2028





CRUISE 15-76-015

GREELY FIORD-76

EXPER NO. 2029

LAT N.80-29-00

LONG W.86-42-00

WATER DEPTH 627

DEPTH INCR.

DATE 270376

LOCAL TIME 0925

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
2.8	2.40	29.870 E	-1.644 D	24.043	1434.5
3.8	3.50	29.912 E	-1.641 D	24.077	1434.6
4.8	4.50	29.934 E	-1.634 D	24.074	1434.7
5.8	5.40	29.946 E	-1.639 D	24.104	1434.7
6.8	6.60	29.947 E	-1.638 D	24.105	1434.7
7.8	7.40	29.957 E	-1.634 D	24.113	1434.7
8.8	8.55	29.963 E	-1.634 D	24.118	1434.8
9.8	9.55	29.981 E	-1.637 D	24.133	1434.8
10.8	10.70	30.041 E	-1.623 D	24.181	1435.0
11.8	11.40	30.259 E	-1.564 D	24.357	1435.6
12.8	12.65	30.434 E	-1.584 D	24.499	1435.7
13.8	13.60	30.562 E	-1.589 D	24.603	1435.9
14.8	14.60	30.666 E	-1.608 D	24.687	1436.0
15.8	15.55	30.735 E	-1.624 D	24.743	1436.0
16.8	16.70	30.812 E	-1.639 D	24.805	1436.1
17.8	17.60	30.880 E	-1.652 D	24.861	1436.1
18.8	18.50	30.917 E	-1.662 D	24.891	1436.1
19.8	19.75	30.943 E	-1.664 D	24.912	1436.2
20.8	20.70	30.982 E	-1.664 D	24.944	1436.2
21.8	21.60	31.022 E	-1.604 D	24.975	1436.6
22.8	22.75	31.086 E	-1.610 D	25.027	1436.7
23.8	23.75	31.174 E	-1.617 D	25.098	1436.8
24.8	24.70	31.301 E	-1.618 D	25.202	1437.0
25.8	25.70	31.424 E	-1.567 D	25.300	1437.4
26.8	26.75	31.536 E	-1.517 D	25.390	1437.8
27.8	27.80	31.679 E	-1.524 D	25.506	1438.0
28.8	28.80	31.761 E	-1.571 D	25.573	1437.9
29.8	29.85	31.840 E	-1.572 D	25.637	1438.0
30.8	30.90	31.923 E	-1.558 D	25.704	1438.2
31.8	31.85	32.001 E	-1.553 D	25.768	1438.4
32.8	32.90	32.068 E	-1.555 D	25.822	1438.5
33.8	33.90	32.121 E	-1.553 D	25.865	1438.6
34.8	34.95	32.167 E	-1.542 D	25.901	1438.7
35.8	35.95	32.216 E	-1.535 D	25.941	1438.8
36.8	37.00	32.273 E	-1.531 D	25.937	1439.0
37.8	37.95	32.327 E	-1.528 D	26.031	1439.1
38.8	39.05	32.373 E	-1.496 D	26.067	1439.3
39.8	39.85	32.416 E	-1.517 D	26.103	1439.3
40.8	40.90	32.453 E	-1.515 D	26.133	1439.3
41.8	42.00	32.491 E	-1.511 D	26.163	1439.4
42.8	42.85	32.534 E	-1.493 D	26.198	1439.6
43.8	44.05	32.580 E	-1.488 D	26.235	1439.7
44.8	44.90	32.609 E	-1.484 D	26.258	1439.8
45.8	46.00	32.637 E	-1.482 D	26.281	1439.8
46.8	47.05	32.663 E	-1.474 D	26.302	1439.9
47.8	48.00	32.679 E	-1.467 D	26.314	1440.0
48.8	49.20	32.724 E	-1.474 D	26.351	1440.1
49.8	50.20	32.758 E	-1.477 D	26.379	1440.1
50.8	51.15	32.779 E	-1.475 D	26.396	1440.2
51.8	52.30	32.802 E	-1.463 D	26.414	1440.3
52.8	53.10	32.831 E	-1.478 D	26.438	1440.3
53.8	54.15	32.856 E	-1.476 D	26.458	1440.3
54.8	55.20	32.876 E	-1.468 D	26.475	1440.4
55.8	56.05	32.900 E	-1.458 D	26.494	1440.5
56.8	57.25	32.921 E	-1.461 D	26.510	1440.5
57.8	58.25	32.944 E	-1.465 D	26.529	1440.6
58.8	59.30	32.957 E	-1.447 D	26.540	1440.7
59.8	60.40	32.984 E	-1.436 D	26.561	1440.8
60.8	61.25	33.004 E	-1.415 D	26.576	1440.9
61.8	62.25	33.039 E	-1.393 D	26.605	1441.1
62.8	63.35	33.059 E	-1.343 D	26.619	1441.4
63.8	64.30	33.090 E	-1.362 D	26.644	1441.3

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
64.8	65.45	33.095 E	-1.342 D	26.648	1441.5
65.8	66.50	33.158 E	-1.405 D	26.701	1441.3
66.8	67.25	33.151 E	-1.362 D	26.694	1441.5
67.8	68.40	33.176 E	-1.354 D	26.714	1441.6
68.8	69.40	33.190 E	-1.310 D	26.724	1441.8
69.8	70.50	33.214 E	-1.290 D	26.743	1442.0
70.8	71.45	33.242 E	-1.317 D	26.767	1441.9
71.8	72.45	33.268 E	-1.299 D	26.788	1442.0
72.8	73.50	33.294 E	-1.293 D	26.808	1442.1
73.8	74.65	33.322 E	-1.231 D	26.831	1442.2
74.8	75.55	33.339 E	-1.275 D	26.844	1442.3
75.8	76.55	33.357 E	-1.214 D	26.857	1442.6
76.8	77.65	33.386 E	-1.190 D	26.879	1442.8
77.8	78.60	33.402 E	-1.159 D	26.892	1443.0
78.8	79.65	33.417 E	-1.157 D	26.904	1443.0
79.8	80.60	33.439 E	-1.152 D	26.921	1443.1
80.8	81.65	33.447 E	-1.147 D	26.928	1443.1
81.8	82.60	33.465 E	-1.138 D	26.942	1443.2
82.8	83.65	33.486 E	-1.125 D	26.959	1443.3
83.8	84.85	33.504 E	-1.118 D	26.973	1443.4
84.8	85.60	33.518 E	-1.110 D	26.984	1443.5
85.8	86.75	33.541 E	-1.129 D	27.004	1443.4
86.8	87.75	33.565 E	-1.123 D	27.022	1443.5
87.8	88.70	33.579 E	-1.118 D	27.034	1443.6
88.8	89.95	33.594 E	-1.107 D	27.046	1443.7
89.8	90.80	33.600 E	-1.088 D	27.050	1443.8
90.8	91.85	33.617 E	-1.055 D	27.062	1444.0
91.8	92.75	33.637 E	-1.038 D	27.078	1444.1
92.8	93.80	33.652 E	-1.039 D	27.090	1444.1
93.8	95.00	33.665 E	-0.934 D	27.099	1444.4
94.8	95.90	33.682 E	-0.968 D	27.111	1444.5
95.8	97.00	33.699 E	-0.953 D	27.125	1444.6
96.8	98.00	33.710 E	-0.974 D	27.135	1444.6
97.8	99.00	33.724 E	-0.958 D	27.146	1444.7
98.8	100.00	33.735 E	-0.933 D	27.153	1444.9
99.8	101.00	33.753 D	-0.912 C	27.167	1445.0
100.8	102.10	33.771 D	-0.910 C	27.182	1445.0
101.8	103.00	33.786 D	-0.893 C	27.193	1445.2
102.8	104.00	33.801 D	-0.878 C	27.205	1445.3
103.8	104.95	33.812 D	-0.877 C	27.214	1445.3
104.8	106.15	33.817 D	-0.874 C	27.218	1445.3
105.8	107.10	33.826 D	-0.867 C	27.225	1445.4
106.8	108.00	33.836 D	-0.853 C	27.232	1445.5
107.8	109.15	33.848 D	-0.846 C	27.242	1445.6
108.8	110.20	33.853 D	-0.839 C	27.245	1445.6
109.8	111.15	33.859 D	-0.835 C	27.250	1445.7
110.8	112.05	33.868 D	-0.830 C	27.257	1445.7
111.8	113.25	33.875 D	-0.816 C	27.262	1445.8
112.8	114.25	33.891 D	-0.805 C	27.275	1445.9
113.8	115.25	33.908 D	-0.792 C	27.288	1446.0
114.8	116.30	33.913 D	-0.779 C	27.292	1446.1
115.8	117.25	33.925 D	-0.775 C	27.302	1446.1
116.8	118.15	33.935 D	-0.762 C	27.309	1446.2
117.8	119.35	33.942 D	-0.754 C	27.315	1446.3
118.8	120.20	33.947 D	-0.749 C	27.318	1446.3
119.8	121.40	33.953 D	-0.742 C	27.322	1446.4
120.8	122.25	33.958 D	-0.733 C	27.326	1446.5
121.8	123.40	33.965 D	-0.724 C	27.331	1446.5
122.8	124.45	33.977 D	-0.725 C	27.341	1446.6
123.8	125.40	33.982 D	-0.719 C	27.346	1446.6
124.8	126.50	33.989 D	-0.715 C	27.351	1446.7
125.8	127.40	33.997 D	-0.716 C	27.357	1446.7
126.8	128.55	33.999 D	-0.712 C	27.359	1446.7
127.8	129.45	34.005 D	-0.706 C	27.363	1446.8
128.8	130.50	34.010 D	-0.700 C	27.368	1446.8
129.8	131.45	34.015 D	-0.698 C	27.371	1446.9
130.8	132.65	34.018 D	-0.695 C	27.373	1446.9
131.8	133.45	34.022 D	-0.686 C	27.376	1447.0
132.8	134.70	34.029 D	-0.676 C	27.381	1447.0

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
133.8	135.45	34.035 D	-0.677 C	27.387	1447.0
134.8	136.60	34.041 D	-0.672 C	27.391	1447.1
135.8	137.50	34.051 D	-0.657 C	27.398	1447.2
136.8	138.60	34.063 D	-0.649 C	27.408	1447.3
137.8	139.70	34.071 D	-0.634 C	27.414	1447.4
138.8	140.55	34.082 D	-0.637 C	27.423	1447.4
139.8	141.70	34.088 D	-0.632 C	27.428	1447.4
140.8	142.65	34.092 D	-0.614 C	27.430	1447.5
141.8	143.75	34.106 D	-0.614 C	27.441	1447.6
142.8	144.80	34.113 D	-0.611 C	27.447	1447.6
143.8	145.85	34.124 D	-0.602 C	27.456	1447.7
144.8	146.65	34.129 D	-0.597 C	27.459	1447.7
145.8	147.75	34.135 D	-0.583 C	27.464	1447.8
146.8	148.85	34.144 D	-0.575 C	27.471	1447.9
147.8	149.95	34.149 D	-0.572 C	27.474	1447.9
148.8	150.90	34.159 D	-0.562 C	27.482	1448.0
149.8	151.75	34.164 D	-0.554 C	27.486	1448.1
150.8	152.90	34.168 D	-0.547 C	27.489	1448.1
151.8	153.90	34.174 D	-0.547 C	27.493	1448.1
152.8	154.95	34.183 D	-0.543 C	27.501	1448.2
153.8	155.80	34.192 D	-0.537 C	27.507	1448.2
154.8	157.00	34.193 D	-0.534 C	27.509	1448.3
155.8	158.05	34.203 D	-0.532 C	27.517	1448.3
156.8	159.05	34.209 D	-0.531 C	27.521	1448.4
157.8	159.90	34.216 D	-0.526 C	27.526	1448.4
158.8	161.15	34.220 D	-0.525 C	27.529	1448.4
159.8	161.95	34.223 D	-0.522 C	27.532	1448.5
160.8	163.10	34.229 D	-0.515 C	27.537	1448.5
161.8	164.15	34.239 D	-0.500 C	27.544	1448.6
162.8	165.15	34.247 D	-0.490 C	27.550	1448.7
163.8	166.20	34.255 D	-0.481 C	27.556	1448.8
164.8	167.15	34.266 D	-0.472 C	27.565	1448.8
165.8	168.15	34.279 D	-0.460 C	27.575	1448.9
166.8	169.25	34.292 D	-0.451 C	27.584	1449.0
167.8	170.05	34.297 D	-0.445 C	27.589	1449.1
168.8	171.25	34.301 D	-0.439 C	27.592	1449.1
169.8	172.15	34.308 D	-0.435 C	27.597	1449.2
170.8	173.35	34.313 D	-0.425 C	27.601	1449.2
171.8	174.30	34.321 D	-0.413 C	27.606	1449.3
172.8	175.30	34.332 D	-0.403 C	27.615	1449.4
173.8	176.30	34.338 D	-0.391 C	27.619	1449.5
174.8	177.30	34.349 D	-0.378 C	27.627	1449.6
175.8	178.45	34.360 D	-0.368 C	27.636	1449.6
176.8	179.40	34.368 D	-0.361 C	27.642	1449.7
177.8	180.45	34.373 D	-0.353 C	27.646	1449.8
178.8	181.30	34.379 D	-0.347 C	27.650	1449.8
179.8	182.55	34.384 D	-0.341 C	27.654	1449.9
180.8	183.35	34.394 D	-0.328 C	27.661	1449.9
181.8	184.55	34.400 D	-0.320 C	27.666	1450.0
182.8	185.50	34.408 D	-0.315 C	27.672	1450.1
183.8	186.55	34.411 D	-0.307 C	27.674	1450.1
184.8	187.45	34.418 D	-0.296 C	27.680	1450.2
185.8	188.60	34.426 D	-0.287 C	27.686	1450.3
186.8	189.50	34.437 D	-0.276 C	27.694	1450.3
187.8	190.50	34.447 D	-0.266 C	27.702	1450.4
188.8	191.60	34.456 D	-0.262 C	27.709	1450.5
189.8	192.65	34.462 D	-0.255 C	27.713	1450.5
190.8	193.70	34.468 D	-0.247 C	27.718	1450.6
191.8	194.60	34.474 D	-0.240 C	27.722	1450.6
192.8	195.80	34.478 D	-0.236 C	27.725	1450.7
193.8	196.70	34.484 D	-0.232 C	27.730	1450.7
194.8	197.70	34.489 D	-0.222 C	27.734	1450.8
195.8	198.65	34.494 D	-0.214 C	27.737	1450.9
196.8	199.70	34.509 D	-0.208 C	27.749	1450.9
197.8	200.80	34.509 D	-0.197 C	27.749	1451.0
198.8	201.65	34.518 D	-0.189 C	27.756	1451.1
199.8	202.70	34.524 D	-0.183 C	27.750	1451.1
200.8	203.80	34.528 D	-0.176 C	27.763	1451.2
201.8	204.70	34.533 D	-0.169 C	27.766	1451.2



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
202.8	205.80	34.537 D	-0.160 C	27.770	1451.3
203.8	206.90	34.546 D	-0.157 C	27.777	1451.3
204.8	207.80	34.550 D	-0.151 C	27.780	1451.4
205.8	208.85	34.559 D	-0.144 C	27.786	1451.4
206.8	209.85	34.561 D	-0.137 C	27.787	1451.5
207.8	211.05	34.569 D	-0.131 C	27.793	1451.6
208.8	211.95	34.571 D	-0.121 C	27.795	1451.6
209.8	213.00	34.578 D	-0.112 C	27.800	1451.7
210.8	213.85	34.581 D	-0.103 C	27.802	1451.7
211.8	215.00	34.589 D	-0.093 C	27.808	1451.8
212.8	216.05	34.594 D	-0.091 C	27.811	1451.9
213.8	217.15	34.595 D	-0.087 C	27.813	1451.9
214.8	218.00	34.599 D	-0.084 C	27.815	1451.9
215.8	218.95	34.602 D	-0.081 C	27.818	1452.0
216.8	220.05	34.608 D	-0.079 C	27.822	1452.0
217.8	221.15	34.608 D	-0.072 C	27.822	1452.0
218.8	222.20	34.613 D	-0.067 C	27.826	1452.1
219.8	223.25	34.615 D	-0.061 C	27.827	1452.1
220.8	224.25	34.620 D	-0.057 C	27.831	1452.2
221.8	225.30	34.624 D	-0.052 C	27.834	1452.2
222.8	226.30	34.627 D	-0.049 C	27.836	1452.3
223.8	227.20	34.630 D	-0.042 C	27.838	1452.3
224.8	228.15	34.635 D	-0.037 C	27.842	1452.4
225.8	229.15	34.637 D	-0.035 C	27.843	1452.4
226.8	230.20	34.638 D	-0.032 C	27.845	1452.4
227.8	231.30	34.640 D	-0.029 C	27.846	1452.4
228.8	232.40	34.643 D	-0.026 C	27.848	1452.5
229.8	233.30	34.646 D	-0.024 C	27.850	1452.5
230.8	234.35	34.650 D	-0.019 C	27.853	1452.6
231.8	235.40	34.653 D	-0.016 C	27.855	1452.6
232.8	236.35	34.655 D	-0.012 C	27.857	1452.6
233.8	237.50	34.660 D	-0.008 C	27.861	1452.7
234.8	238.45	34.661 D	-0.005 C	27.862	1452.7
235.8	239.45	34.664 D	-0.003 C	27.864	1452.7
236.8	240.50	34.669 D	0.0 C	27.867	1452.8
237.8	241.60	34.670 D	0.006 C	27.868	1452.8
238.8	242.50	34.670 D	0.009 C	27.868	1452.8
239.8	243.45	34.672 D	0.012 C	27.869	1452.9
240.8	244.60	34.670 D	0.022 C	27.867	1452.9
241.8	245.60	34.672 D	0.021 C	27.869	1453.0
242.8	246.65	34.673 D	0.023 C	27.870	1453.0
243.8	247.60	34.675 D	0.031 C	27.871	1453.0
244.8	248.70	34.681 D	0.033 C	27.875	1453.1
245.8	249.55	34.681 D	0.037 C	27.876	1453.1
246.8	250.75	34.684 D	0.040 C	27.878	1453.1
247.8	251.75	34.689 D	0.043 C	27.882	1453.2
248.8	252.85	34.689 D	0.047 C	27.882	1453.2
249.8	253.65	34.693 D	0.051 C	27.884	1453.3
250.8	254.65	34.696 D	0.055 C	27.887	1453.3
251.8	255.80	34.701 D	0.059 C	27.891	1453.3
252.8	256.85	34.703 D	0.061 C	27.892	1453.4
253.8	257.85	34.704 D	0.062 C	27.892	1453.4
254.8	258.85	34.705 D	0.069 C	27.893	1453.4
255.8	259.90	34.709 D	0.075 C	27.896	1453.5
256.8	260.90	34.714 D	0.076 C	27.900	1453.5
257.8	261.90	34.716 D	0.080 C	27.902	1453.6
258.8	263.00	34.718 D	0.082 C	27.903	1453.6
259.8	263.95	34.721 D	0.089 C	27.905	1453.6
260.8	264.95	34.726 D	0.089 C	27.909	1453.7
261.8	265.95	34.726 D	0.093 C	27.909	1453.7
262.8	266.95	34.729 D	0.094 C	27.911	1453.7
263.8	268.00	34.729 D	0.096 C	27.911	1453.7
264.8	269.10	34.732 D	0.098 C	27.913	1453.8
265.8	270.15	34.736 D	0.100 C	27.916	1453.8
266.8	271.15	34.736 D	0.104 C	27.917	1453.8
267.8	272.10	34.736 D	0.106 C	27.917	1453.9
268.8	273.15	34.740 D	0.111 C	27.919	1453.9
269.8	274.15	34.745 D	0.110 C	27.923	1453.9
270.8	275.15	34.742 D	0.113 C	27.921	1454.0

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
271.8	276.20	34.744 D	0.115 C	27.922	1454.0
272.8	277.25	34.746 D	0.116 C	27.924	1454.0
273.8	278.15	34.749 D	0.117 C	27.926	1454.0
274.8	279.30	34.749 D	0.120 C	27.926	1454.1
275.8	280.25	34.752 D	0.121 C	27.928	1454.1
276.8	281.15	34.752 D	0.125 C	27.928	1454.1
277.8	282.40	34.752 D	0.123 C	27.928	1454.2
278.8	283.25	34.756 D	0.123 C	27.931	1454.2
279.8	284.45	34.757 D	0.123 C	27.932	1454.2
280.8	285.25	34.758 D	0.129 C	27.933	1454.2
281.8	286.45	34.761 D	0.123 C	27.936	1454.2
282.8	287.30	34.761 D	0.133 C	27.935	1454.3
283.8	288.40	34.765 D	0.134 C	27.938	1454.3
284.8	289.50	34.765 D	0.136 C	27.938	1454.3
285.8	290.45	34.768 D	0.140 C	27.940	1454.4
286.8	291.50	34.771 D	0.143 C	27.943	1454.4
287.8	292.60	34.773 D	0.147 C	27.944	1454.4
288.8	293.50	34.775 D	0.149 C	27.945	1454.5
289.8	294.60	34.777 D	0.151 C	27.947	1454.5
290.8	295.65	34.778 D	0.151 C	27.948	1454.5
291.8	296.65	34.778 D	0.153 C	27.948	1454.5
292.8	297.65	34.780 D	0.153 C	27.949	1454.6
293.8	298.60	34.782 D	0.159 C	27.950	1454.6
294.8	299.55	34.784 D	0.159 C	27.952	1454.6
295.8	300.60	34.785 D	0.161 C	27.953	1454.7
296.8	301.60	34.786 D	0.161 C	27.954	1454.7
297.8	302.70	34.787 D	0.162 C	27.954	1454.7
298.8	303.70	34.786 D	0.165 C	27.953	1454.7
299.8	304.80	34.789 D	0.167 C	27.956	1454.8
300.8	305.80	34.790 D	0.169 C	27.957	1454.8
301.8	306.65	34.792 D	0.171 C	27.958	1454.8
302.8	307.65	34.793 D	0.171 C	27.958	1454.8
303.8	308.65	34.793 D	0.171 C	27.959	1454.8
304.8	309.85	34.793 D	0.174 C	27.959	1454.9
305.8	310.80	34.797 D	0.174 C	27.962	1454.9
306.8	311.80	34.798 D	0.173 C	27.962	1454.9
307.8	312.75	34.800 D	0.183 C	27.964	1455.0
308.8	313.80	34.802 D	0.183 C	27.966	1455.0
309.8	314.90	34.802 D	0.184 C	27.965	1455.0
310.8	316.05	34.802 D	0.188 C	27.965	1455.1
311.8	317.00	34.806 D	0.189 C	27.968	1455.1
312.8	318.00	34.807 D	0.190 C	27.969	1455.1
313.8	319.00	34.806 D	0.191 C	27.968	1455.1
314.8	320.10	34.807 D	0.193 C	27.969	1455.2
315.8	321.15	34.810 D	0.194 C	27.971	1455.2
316.8	322.10	34.811 D	0.195 C	27.972	1455.2
317.8	323.15	34.810 D	0.195 C	27.971	1455.2
318.8	323.95	34.812 D	0.197 C	27.972	1455.2
319.8	325.00	34.815 D	0.197 C	27.975	1455.3
320.8	326.00	34.815 D	0.199 C	27.975	1455.3
321.8	327.20	34.817 D	0.201 C	27.976	1455.3
322.8	328.20	34.817 D	0.203 C	27.976	1455.3
323.8	329.20	34.818 D	0.205 C	27.977	1455.4
324.8	330.30	34.819 D	0.206 C	27.978	1455.4
325.8	331.05	34.822 D	0.207 C	27.980	1455.4
326.8	332.25	34.825 D	0.206 C	27.983	1455.4
327.8	333.35	34.824 D	0.209 C	27.981	1455.5
328.8	334.15	34.824 D	0.211 C	27.981	1455.5
329.8	335.20	34.826 D	0.210 C	27.983	1455.5
330.8	336.30	34.827 D	0.211 C	27.984	1455.5
331.8	337.30	34.826 D	0.211 C	27.983	1455.5
332.8	338.30	34.828 D	0.211 C	27.985	1455.6
333.8	339.30	34.827 D	0.213 C	27.984	1455.6
334.8	340.50	34.829 D	0.213 C	27.986	1455.6
335.8	341.50	34.829 D	0.214 C	27.985	1455.6
336.8	342.40	34.828 D	0.216 C	27.984	1455.7
337.8	343.45	34.831 D	0.216 C	27.987	1455.7
338.8	344.45	34.832 D	0.216 C	27.988	1455.7
339.8	345.40	34.833 D	0.215 C	27.988	1455.7



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
340.8	346.50	34.833 D	0.214 C	27.989	1455.7
341.8	347.55	34.833 D	0.215 C	27.988	1455.7
342.8	348.50	34.835 D	0.215 C	27.990	1455.8
343.8	349.45	34.832 D	0.217 C	27.988	1455.8
344.8	350.55	34.835 D	0.215 C	27.990	1455.8
345.8	351.60	34.836 D	0.216 C	27.991	1455.8
346.8	352.70	34.835 D	0.218 C	27.990	1455.8
347.8	353.75	34.838 D	0.217 C	27.993	1455.9
348.8	354.55	34.839 D	0.217 C	27.993	1455.9
349.8	355.65	34.837 D	0.218 C	27.992	1455.9
350.8	356.75	34.838 D	0.219 C	27.993	1455.9
351.8	357.70	34.838 D	0.221 C	27.993	1455.9
352.8	358.85	34.839 D	0.226 C	27.993	1456.0
353.8	359.65	34.840 D	0.227 C	27.994	1456.0
354.8	360.75	34.842 D	0.226 C	27.995	1456.0
355.8	361.80	34.841 D	0.228 C	27.994	1456.0
356.8	362.80	34.843 D	0.228 C	27.996	1456.1
357.8	363.95	34.841 D	0.229 C	27.994	1456.1
358.8	364.85	34.845 D	0.228 C	27.997	1456.1
359.8	365.80	34.844 D	0.229 C	27.997	1456.1
360.8	366.95	34.844 D	0.229 C	27.996	1456.1
361.8	367.80	34.845 D	0.229 C	27.997	1456.2
362.8	368.90	34.847 D	0.229 C	27.999	1456.2
363.8	370.00	34.848 D	0.229 C	28.000	1456.2
364.8	371.10	34.846 D	0.230 C	27.998	1456.2
365.8	372.00	34.847 D	0.231 C	27.999	1456.2
366.8	372.95	34.847 D	0.232 C	27.999	1456.3
367.8	374.00	34.848 D	0.230 C	28.000	1456.3
368.8	375.15	34.847 D	0.232 C	27.999	1456.3
369.8	376.10	34.848 D	0.232 C	28.000	1456.3
370.8	377.00	34.848 D	0.233 C	27.999	1456.3
371.8	378.15	34.848 D	0.233 C	28.000	1456.3
372.8	379.15	34.848 D	0.233 C	27.999	1456.4
373.8	380.10	34.850 D	0.233 C	28.001	1456.4
374.8	381.05	34.851 D	0.232 C	28.002	1456.4
375.8	382.25	34.852 D	0.231 C	28.003	1456.4
376.8	383.25	34.849 D	0.232 C	28.001	1456.4
377.8	384.25	34.853 D	0.232 C	28.004	1456.4
378.8	385.15	34.853 D	0.233 C	28.003	1456.5
379.8	386.20	34.852 D	0.236 C	28.002	1456.5
380.8	387.40	34.853 D	0.235 C	28.004	1456.5
381.8	388.20	34.853 D	0.236 C	28.004	1456.5
382.8	389.35	34.855 D	0.235 C	28.005	1456.5
383.8	390.40	34.856 D	0.235 C	28.006	1456.6
384.8	391.35	34.857 D	0.235 C	28.007	1456.6
385.8	392.45	34.855 D	0.236 C	28.005	1456.6
386.8	393.30	34.855 D	0.237 C	28.005	1456.6
387.8	394.40	34.857 D	0.236 C	28.006	1456.6
388.8	395.40	34.856 D	0.236 C	28.006	1456.7
389.8	396.60	34.855 D	0.235 C	28.005	1456.7
390.8	397.50	34.856 D	0.234 C	28.006	1456.7
391.8	398.50	34.856 D	0.233 C	28.006	1456.7
392.8	399.35	34.857 D	0.233 C	28.007	1456.7
393.8	400.55	34.859 D	0.233 C	28.009	1456.7
394.8	401.45	34.858 D	0.234 C	28.007	1456.7
395.8	402.50	34.860 D	0.233 C	28.009	1456.8
396.8	403.55	34.859 D	0.234 C	28.009	1456.8
397.8	404.50	34.860 D	0.234 C	28.009	1456.8
398.8	405.70	34.859 D	0.234 C	28.009	1456.8
399.8	406.65	34.861 D	0.233 C	28.010	1456.8
400.8	407.65	34.861 D	0.234 C	28.010	1456.9
401.8	408.65	34.858 D	0.236 C	28.008	1456.9
402.8	409.75	34.860 D	0.235 C	28.009	1456.9
403.8	410.75	34.861 D	0.234 C	28.010	1456.9
404.8	411.80	34.859 D	0.235 C	28.008	1456.9
405.8	412.65	34.860 D	0.235 C	28.009	1456.9
406.8	413.85	34.861 D	0.235 C	28.010	1457.0
407.8	414.85	34.860 D	0.235 C	28.009	1457.0
408.8	415.90	34.862 D	0.235 C	28.011	1457.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
409.8	416.70	34.862 D	0.236 C	28.011	1457.0
410.8	417.90	34.861 D	0.236 C	28.010	1457.0
411.8	418.75	34.863 D	0.235 C	28.012	1457.0
412.8	419.85	34.862 D	0.237 C	28.011	1457.1
413.8	420.95	34.863 D	0.237 C	28.011	1457.1
414.8	422.00	34.863 D	0.236 C	28.012	1457.1
415.8	423.05	34.864 D	0.236 C	28.012	1457.1
416.8	424.05	34.865 D	0.236 C	28.013	1457.1
417.8	425.05	34.864 D	0.236 C	28.013	1457.2
418.8	425.95	34.864 D	0.236 C	28.012	1457.2
419.8	426.85	34.864 D	0.237 C	28.012	1457.2
420.8	427.95	34.863 D	0.237 C	28.011	1457.2
421.8	429.15	34.865 D	0.236 C	28.013	1457.2
422.8	430.10	34.863 D	0.237 C	28.012	1457.2
423.8	431.20	34.866 D	0.235 C	28.014	1457.3
424.8	432.05	34.866 D	0.236 C	28.014	1457.3
425.8	433.25	34.865 D	0.236 C	28.013	1457.3
426.8	434.15	34.866 D	0.237 C	28.014	1457.3
427.8	435.15	34.863 D	0.238 C	28.012	1457.3
428.8	436.25	34.864 D	0.238 C	28.012	1457.3
429.8	437.10	34.867 D	0.236 C	28.015	1457.4
430.8	438.25	34.867 D	0.237 C	28.015	1457.4
431.8	439.35	34.867 D	0.236 C	28.015	1457.4
432.8	440.30	34.867 D	0.236 C	28.015	1457.4
433.8	441.35	34.866 D	0.237 C	28.014	1457.4
434.8	442.20	34.867 D	0.237 C	28.015	1457.4
435.8	443.30	34.866 D	0.239 C	28.014	1457.5
436.8	444.35	34.868 D	0.239 C	28.015	1457.5
437.8	445.30	34.868 D	0.239 C	28.015	1457.5
438.8	446.45	34.867 D	0.239 C	28.015	1457.5
439.8	447.30	34.866 D	0.239 C	28.014	1457.5
440.8	448.45	34.868 D	0.238 C	28.016	1457.6
441.8	449.35	34.867 D	0.240 C	28.014	1457.6
442.8	450.50	34.867 D	0.239 C	28.015	1457.6
443.8	451.50	34.868 D	0.239 C	28.016	1457.6
444.8	452.55	34.870 D	0.238 C	28.017	1457.6
445.8	453.45	34.870 D	0.239 C	28.017	1457.6
446.8	454.60	34.869 D	0.238 C	28.016	1457.7
447.8	455.60	34.867 D	0.240 C	28.015	1457.7
448.8	456.60	34.868 D	0.240 C	28.016	1457.7
449.8	457.60	34.869 D	0.240 C	28.016	1457.7
450.8	458.55	34.869 D	0.240 C	28.016	1457.7
451.8	459.65	34.872 D	0.234 C	28.018	1457.7
452.8	460.55	34.871 D	0.238 C	28.018	1457.8
453.8	461.75	34.872 D	0.238 C	28.019	1457.8
454.8	462.55	34.873 D	0.238 C	28.019	1457.8
455.8	463.75	34.872 D	0.238 C	28.019	1457.8
456.8	464.70	34.870 D	0.239 C	28.017	1457.8
457.8	465.70	34.873 D	0.237 C	28.020	1457.8
458.8	466.80	34.873 D	0.238 C	28.020	1457.9
459.8	467.65	34.874 D	0.237 C	28.020	1457.9
460.8	468.85	34.873 D	0.237 C	28.020	1457.9
461.8	469.70	34.874 D	0.237 C	28.020	1457.9
462.8	470.90	34.875 D	0.238 C	28.021	1457.9
463.8	471.95	34.873 D	0.238 C	28.020	1457.9
464.8	472.90	34.874 D	0.238 C	28.020	1458.0
465.8	473.80	34.874 D	0.237 C	28.021	1458.0
466.8	475.10	34.874 D	0.238 C	28.020	1458.0
467.8	475.95	34.875 D	0.237 C	28.021	1458.0
468.8	477.00	34.874 D	0.238 C	28.021	1458.0
469.8	477.95	34.877 D	0.236 C	28.023	1458.0
470.8	479.05	34.876 D	0.237 C	28.022	1458.1
471.8	480.15	34.875 D	0.237 C	28.021	1458.1
472.8	481.00	34.876 D	0.237 C	28.022	1458.1
473.8	482.15	34.878 D	0.236 C	28.024	1458.1
474.8	482.95	34.875 D	0.237 C	28.021	1458.1
475.8	484.15	34.877 D	0.236 C	28.023	1458.1
476.8	485.20	34.875 D	0.237 C	28.021	1458.2
477.8	486.20	34.877 D	0.235 C	28.023	1458.2

DEPTH	DENS	SAL	TEMP	SIGMAT	SOUND
478.8	487.25	34.877 D	0.235 C	28.023	1458.2
479.8	488.05	34.877 D	0.235 C	28.023	1458.2
480.8	489.30	34.876 D	0.236 C	28.022	1458.2
481.8	490.25	34.878 D	0.234 C	28.024	1458.2
482.8	491.20	34.878 D	0.235 C	28.024	1458.3
483.8	492.30	34.877 D	0.235 C	28.023	1458.3
484.8	493.30	34.877 D	0.235 C	28.023	1458.3
485.8	494.35	34.876 D	0.235 C	28.022	1458.3
486.8	495.40	34.877 D	0.234 C	28.023	1458.3
487.8	496.25	34.877 D	0.234 C	28.023	1458.3
488.8	497.40	34.877 D	0.235 C	28.023	1458.4
489.8	498.25	34.878 D	0.234 C	28.024	1458.4
490.8	499.50	34.878 D	0.233 C	28.024	1458.4
491.8	500.40	34.878 D	0.234 C	28.024	1458.4
492.8	501.40	34.877 D	0.234 C	28.023	1458.4
493.8	502.50	34.879 D	0.233 C	28.025	1458.4
494.8	503.45	34.880 D	0.233 C	28.026	1458.4
495.8	504.55	34.878 D	0.233 C	28.024	1458.5
496.8	505.55	34.879 D	0.233 C	28.025	1458.5
497.8	506.60	34.878 D	0.233 C	28.024	1458.5
498.8	507.65	34.880 D	0.231 C	28.026	1458.5
499.8	508.65	34.881 D	0.231 C	28.026	1458.5
500.8	509.50	34.881 D	0.230 C	28.027	1458.5
501.8	510.50	34.880 D	0.231 C	28.025	1458.6
502.8	511.65	34.880 D	0.230 C	28.026	1458.6
503.8	512.75	34.881 D	0.230 C	28.026	1458.6
504.8	513.70	34.880 D	0.230 C	28.026	1458.6
505.8	514.55	34.881 D	0.230 C	28.027	1458.6
506.8	515.60	34.881 D	0.230 C	28.026	1458.6
507.8	516.80	34.881 D	0.230 C	28.027	1458.7
508.8	517.75	34.881 D	0.230 C	28.026	1458.7
509.8	518.70	34.881 D	0.229 C	28.027	1458.7
510.8	519.75	34.881 D	0.229 C	28.026	1458.7
511.8	520.90	34.882 D	0.229 C	28.027	1458.7
512.8	521.85	34.881 D	0.229 C	28.026	1458.7
513.8	522.75	34.880 D	0.229 C	28.026	1458.7
514.8	523.75	34.881 D	0.228 C	28.027	1458.8
515.8	524.85	34.882 D	0.228 C	28.027	1458.8
516.8	525.95	34.881 D	0.228 C	28.027	1458.8
517.8	526.90	34.881 D	0.228 C	28.026	1458.8
518.8	528.00	34.880 D	0.228 C	28.026	1458.8
519.8	528.95	34.883 D	0.227 C	28.029	1458.8
520.8	530.05	34.883 D	0.227 C	28.028	1458.9
521.8	530.95	34.883 D	0.225 C	28.028	1458.9
522.8	531.95	34.883 D	0.226 C	28.028	1458.9
523.8	533.15	34.883 D	0.225 C	28.029	1458.9
524.8	534.10	34.884 D	0.225 C	28.029	1458.9
525.8	535.00	34.882 D	0.225 C	28.028	1458.9
526.8	536.20	34.884 D	0.224 C	28.029	1459.0
527.8	537.15	34.882 D	0.225 C	28.028	1459.0
528.8	538.05	34.884 D	0.224 C	28.029	1459.0
529.8	539.15	34.885 D	0.223 C	28.030	1459.0
530.8	540.15	34.886 D	0.223 C	28.031	1459.0
531.8	541.35	34.885 D	0.222 C	28.030	1459.0
532.8	542.30	34.884 D	0.222 C	28.029	1459.0
533.8	543.25	34.882 D	0.223 C	28.028	1459.1
534.8	544.35	34.882 D	0.223 C	28.027	1459.1
535.8	545.35	34.885 D	0.222 C	28.030	1459.1
536.8	546.20	34.884 D	0.223 C	28.029	1459.1
537.8	547.35	34.884 D	0.222 C	28.029	1459.1
538.8	548.35	34.883 D	0.222 C	28.029	1459.1
539.8	549.45	34.885 D	0.221 C	28.030	1459.2
540.8	550.40	34.886 D	0.220 C	28.031	1459.2
541.8	551.50	34.885 D	0.220 C	28.030	1459.2
542.8	552.45	34.886 D	0.220 C	28.031	1459.2
543.8	553.30	34.886 D	0.220 C	28.031	1459.2
544.8	554.60	34.885 D	0.220 C	28.030	1459.2
545.8	555.40	34.887 D	0.219 C	28.032	1459.3
546.8	556.50	34.885 D	0.220 C	28.030	1459.3

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
547.8	557.55	34.885 D	0.221 C	28.030	1459.3
548.8	558.55	34.885 D	0.220 C	28.031	1459.3
549.8	559.50	34.885 D	0.220 C	28.030	1459.3
550.8	560.45	34.887 D	0.219 C	28.032	1459.3
551.8	561.45	34.886 D	0.219 C	28.031	1459.3
552.8	562.50	34.886 D	0.220 C	28.031	1459.4
553.8	563.70	34.884 D	0.220 C	28.029	1459.4
554.8	564.60	34.887 D	0.218 C	28.032	1459.4
555.8	565.75	34.888 D	0.218 C	28.033	1459.4
556.8	566.70	34.887 D	0.217 C	28.032	1459.4
557.8	567.80	34.884 D	0.219 C	28.029	1459.5
558.8	568.75	34.887 D	0.218 C	28.032	1459.5
559.8	569.75	34.887 D	0.217 C	28.032	1459.5
560.8	570.75	34.886 D	0.218 C	28.031	1459.5
561.8	571.80	34.888 D	0.217 C	28.033	1459.5
562.8	572.75	34.889 D	0.216 C	28.033	1459.5
563.8	573.85	34.888 D	0.216 C	28.033	1459.5
564.8	574.90	34.889 D	0.215 C	28.033	1459.6
565.8	575.95	34.888 D	0.216 C	28.033	1459.6
566.8	576.90	34.886 D	0.216 C	28.032	1459.6
567.8	577.90	34.888 D	0.215 C	28.033	1459.6
568.8	578.95	34.888 D	0.216 C	28.033	1459.6
569.8	580.05	34.887 D	0.215 C	28.032	1459.6
570.8	581.00	34.888 D	0.215 C	28.033	1459.7
571.8	581.95	34.889 D	0.214 C	28.033	1459.7
572.8	582.95	34.887 D	0.215 C	28.032	1459.7
573.8	583.95	34.886 D	0.215 C	28.031	1459.7
574.8	585.00	34.887 D	0.214 C	28.032	1459.7
575.8	586.00	34.889 D	0.213 C	28.034	1459.7
576.8	587.05	34.890 D	0.211 C	28.035	1459.7
577.8	588.10	34.888 D	0.213 C	28.033	1459.8
578.8	589.00	34.890 D	0.212 C	28.034	1459.8





OCEANOGRAPHIC DATA

EUREKA SOUND







EXPERIMENT 2029

166

TEMPERATURE, C

-2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00

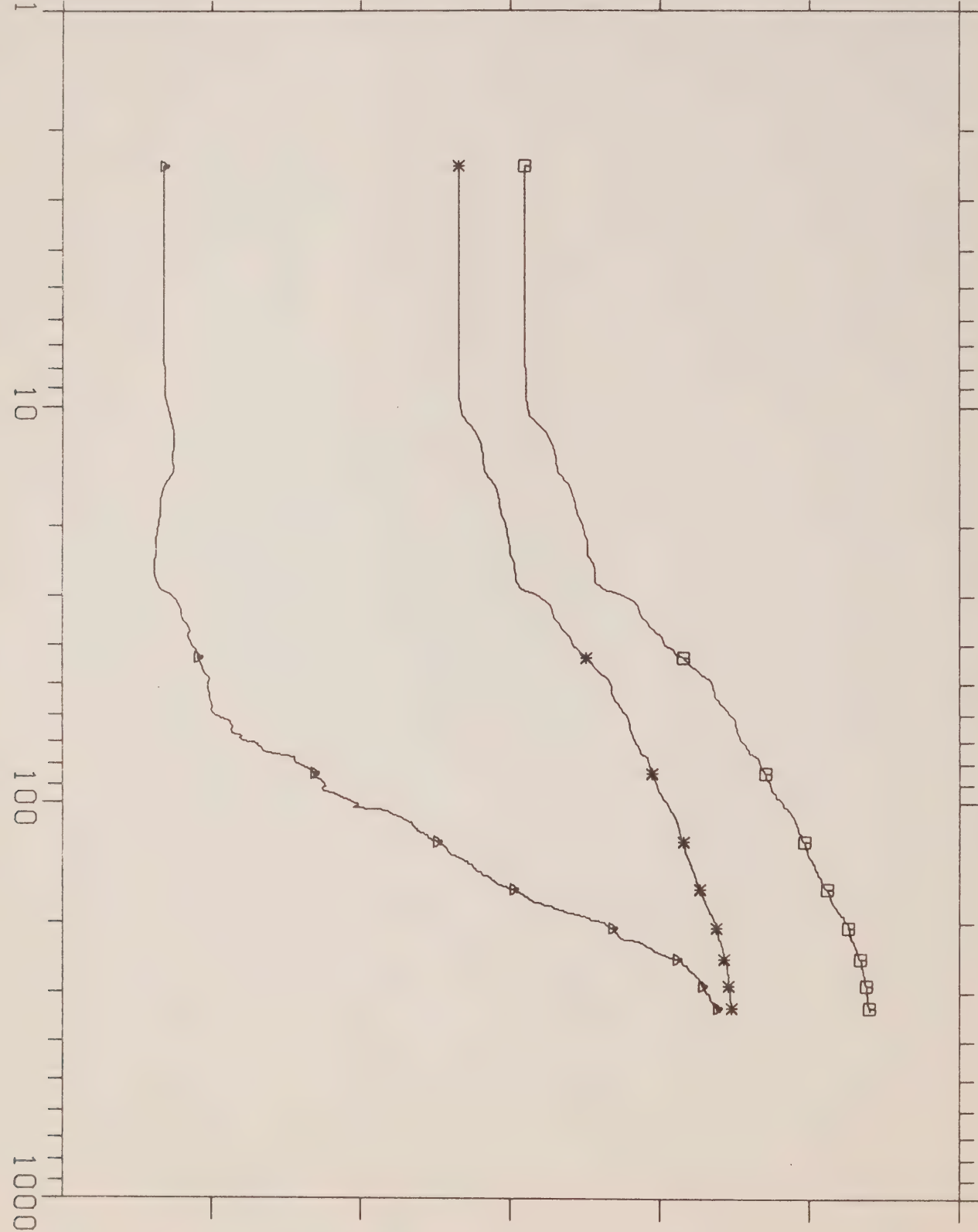
SALINITY 0/00

24.00 26.00 28.00 30.00 32.00 34.00 36.00

SIGMAT

19.00 21.00 23.00 25.00 27.00 29.00 31.00

DEPTH M



CRUISE 15-76-015

EUREKA SOUND-76

EXPER NO. 2029

LAT N.80-22-00

LONG W.86-47-00

WATER DEPTH 365

DEPTH INCR.

DATE 290376

LOCAL TIME 0930

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
2.8	2.45	30.210 E	-1.660 D	24.318	1434.9
3.8	3.45	30.207 E	-1.659 D	24.316	1434.9
4.8	4.35	30.208 E	-1.660 D	24.317	1434.9
5.8	5.25	30.208 E	-1.659 D	24.317	1434.9
6.8	6.40	30.209 E	-1.659 D	24.318	1435.0
7.8	7.35	30.209 E	-1.659 D	24.318	1435.0
8.8	8.45	30.211 E	-1.656 D	24.319	1435.0
9.8	9.35	30.222 E	-1.654 D	24.328	1435.0
10.8	10.50	30.264 E	-1.633 D	24.362	1435.2
11.8	11.50	30.486 E	-1.627 D	24.541	1435.6
12.8	12.40	30.575 E	-1.623 D	24.614	1435.7
13.8	13.40	30.612 E	-1.623 D	24.644	1435.8
14.8	14.50	30.633 E	-1.627 D	24.660	1435.8
15.8	15.65	30.804 E	-1.657 D	24.800	1435.9
16.8	16.55	30.845 E	-1.663 D	24.833	1436.0
17.8	17.50	30.873 E	-1.668 D	24.856	1436.0
18.8	18.55	30.906 E	-1.669 D	24.983	1436.1
19.8	19.60	30.973 E	-1.676 D	24.937	1436.2
20.8	20.65	30.995 E	-1.679 D	24.955	1436.2
21.8	21.55	31.032 E	-1.687 D	24.985	1436.2
22.8	22.60	31.042 E	-1.687 D	24.993	1436.2
23.8	23.60	31.046 E	-1.687 D	24.996	1436.3
24.8	24.55	31.114 E	-1.690 D	25.051	1436.4
25.8	25.70	31.131 E	-1.689 D	25.065	1436.4
26.8	26.65	31.139 E	-1.690 D	25.071	1436.4
27.8	27.65	31.146 E	-1.683 D	25.077	1436.5
28.8	28.75	31.256 E	-1.670 D	25.166	1436.7
29.8	29.55	31.468 E	-1.639 D	25.337	1437.2
30.8	30.85	31.654 E	-1.616 D	25.488	1437.6
31.8	31.75	31.711 E	-1.610 D	25.533	1437.7
32.8	32.65	31.746 E	-1.601 D	25.562	1437.8
33.8	33.80	31.774 E	-1.601 D	25.584	1437.9
34.8	34.70	31.832 E	-1.591 D	25.631	1438.0
35.8	35.85	31.898 E	-1.573 D	25.684	1438.2
36.8	36.90	31.961 E	-1.572 D	25.736	1438.3
37.8	37.75	32.031 E	-1.578 D	25.792	1438.4
38.8	38.80	32.059 E	-1.569 D	25.815	1438.5
39.8	39.80	32.085 E	-1.564 D	25.836	1438.6
40.8	40.75	32.173 E	-1.555 D	25.906	1438.8
41.8	41.95	32.245 E	-1.545 D	25.965	1438.9
42.8	42.90	32.322 E	-1.544 D	26.027	1439.1
43.8	43.95	32.387 E	-1.538 D	26.080	1439.2
44.8	45.05	32.432 E	-1.531 D	26.116	1439.3
45.8	45.85	32.495 E	-1.529 D	26.167	1439.4
46.8	47.05	32.563 E	-1.520 D	26.222	1439.6
47.8	47.95	32.628 E	-1.510 D	26.274	1439.7
48.8	48.90	32.685 E	-1.507 D	26.320	1439.8
49.8	50.05	32.716 E	-1.509 D	26.346	1439.9
50.8	50.90	32.728 E	-1.508 D	26.355	1439.9
51.8	52.10	32.731 E	-1.503 D	26.358	1440.0
52.8	53.10	32.745 E	-1.505 D	26.369	1440.0
53.8	54.20	32.767 E	-1.507 D	26.387	1440.0
54.8	55.05	32.794 E	-1.506 D	26.409	1440.1
55.8	56.00	32.827 E	-1.502 D	26.436	1440.2
56.8	57.20	32.880 E	-1.495 D	26.478	1440.3
57.8	58.20	32.915 E	-1.501 D	26.507	1440.3
58.8	59.15	32.945 E	-1.488 D	26.531	1440.5
59.8	60.20	32.980 E	-1.468 D	26.558	1440.6
60.8	61.25	33.012 E	-1.449 D	26.584	1440.8
61.8	62.15	33.018 E	-1.437 D	26.589	1440.9
62.8	63.35	33.025 E	-1.433 D	26.594	1440.9
63.8	64.25	33.032 E	-1.425 D	26.600	1441.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
64.8	65.35	33.043 E	-1.433 D	26.609	1441.0
65.8	66.25	33.059 E	-1.432 D	26.622	1441.0
66.8	67.35	33.071 E	-1.396 D	26.630	1441.2
67.8	68.35	33.084 E	-1.407 D	26.641	1441.2
68.8	69.40	33.103 E	-1.397 D	26.656	1441.3
69.8	70.35	33.142 E	-1.342 D	26.696	1441.6
70.8	71.30	33.161 E	-1.345 D	26.702	1441.6
71.8	72.45	33.182 E	-1.329 D	26.719	1441.8
72.8	73.30	33.197 E	-1.329 D	26.730	1441.8
73.8	74.50	33.208 E	-1.312 D	26.739	1441.9
74.8	75.45	33.265 E	-1.255 D	26.784	1442.3
75.8	76.45	33.327 E	-1.221 D	26.833	1442.5
76.8	77.40	33.333 E	-1.218 D	26.838	1442.6
77.8	78.55	33.341 E	-1.220 D	26.844	1442.6
78.8	79.55	33.354 E	-1.202 D	26.854	1442.7
79.8	80.50	33.363 E	-1.196 D	26.861	1442.8
80.8	81.55	33.384 E	-1.172 D	26.877	1442.9
81.8	82.55	33.398 E	-1.164 D	26.889	1443.0
82.8	83.65	33.419 E	-1.156 D	26.906	1443.1
83.8	84.60	33.426 E	-1.156 D	26.911	1443.1
84.8	85.60	33.430 E	-1.153 D	26.914	1443.2
85.8	86.50	33.448 E	-1.137 D	26.928	1443.3
86.8	87.70	33.464 E	-1.132 D	26.941	1443.3
87.8	88.55	33.472 E	-1.124 D	26.947	1443.4
88.8	89.65	33.489 E	-1.113 D	26.961	1443.5
89.8	90.65	33.492 E	-1.117 D	26.963	1443.5
90.8	91.65	33.506 E	-1.129 D	26.975	1443.5
91.8	92.75	33.520 E	-1.126 D	26.986	1443.5
92.8	93.70	33.538 E	-1.091 D	26.999	1443.7
93.8	94.85	33.563 E	-1.079 D	27.019	1443.8
94.8	95.80	33.568 E	-1.075 D	27.024	1443.9
95.8	96.90	33.589 E	-1.049 D	27.039	1444.1
96.8	97.90	33.618 E	-1.033 D	27.063	1444.2
97.8	98.75	33.634 E	-1.028 D	27.075	1444.2
98.8	99.85	33.661 E	-1.008 D	27.096	1444.4
99.8	100.75	33.666 D	-1.004 C	27.100	1444.4
100.8	102.00	33.685 D	-1.023 C	27.116	1444.4
101.8	102.80	33.713 D	-0.944 C	27.137	1444.8
102.8	103.90	33.728 D	-0.911 C	27.148	1445.0
103.8	104.95	33.754 D	-0.902 C	27.168	1445.1
104.8	105.95	33.764 D	-0.898 C	27.176	1445.2
105.8	107.00	33.775 D	-0.836 C	27.184	1445.2
106.8	108.10	33.792 D	-0.864 C	27.197	1445.4
107.8	109.00	33.805 D	-0.860 C	27.208	1445.4
108.8	110.10	33.815 D	-0.852 C	27.215	1445.5
109.8	111.10	33.827 D	-0.837 C	27.224	1445.6
110.8	112.00	33.838 D	-0.831 C	27.233	1445.7
111.8	113.15	33.843 D	-0.824 C	27.237	1445.7
112.8	114.00	33.851 D	-0.819 C	27.243	1445.8
113.8	115.20	33.861 D	-0.810 C	27.251	1445.9
114.8	116.10	33.865 D	-0.808 C	27.254	1445.9
115.8	117.15	33.869 D	-0.808 C	27.257	1445.9
116.8	118.20	33.877 D	-0.795 C	27.264	1446.0
117.8	119.25	33.891 D	-0.778 C	27.274	1446.1
118.8	120.15	33.901 D	-0.776 C	27.282	1446.1
119.8	121.15	33.905 D	-0.777 C	27.285	1446.2
120.8	122.25	33.907 D	-0.772 C	27.287	1446.2
121.8	123.25	33.923 D	-0.752 C	27.299	1446.3
122.8	124.40	33.939 D	-0.743 C	27.311	1446.4
123.8	125.35	33.942 D	-0.739 C	27.314	1446.5
124.8	126.45	33.949 D	-0.735 C	27.319	1446.5
125.8	127.40	33.954 D	-0.727 C	27.323	1446.6
126.8	128.45	33.961 D	-0.721 C	27.329	1446.6
127.8	129.40	33.966 D	-0.714 C	27.332	1446.7
128.8	130.45	33.972 D	-0.712 C	27.337	1446.7
129.8	131.50	33.977 D	-0.710 C	27.341	1446.7
130.8	132.45	33.982 D	-0.704 C	27.345	1446.8
131.8	133.55	33.987 D	-0.699 C	27.349	1446.8
132.8	134.35	33.994 D	-0.691 C	27.354	1446.9

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
133.8	135.45	34.006 D	-0.683 C	27.363	1447.0
134.8	136.45	34.008 D	-0.678 C	27.365	1447.0
135.8	137.55	34.027 D	-0.666 C	27.380	1447.1
136.8	138.65	34.037 D	-0.659 C	27.387	1447.2
137.8	139.45	34.046 D	-0.645 C	27.394	1447.3
138.8	140.60	34.061 D	-0.641 C	27.406	1447.3
139.8	141.75	34.065 D	-0.640 C	27.410	1447.4
140.8	142.45	34.075 D	-0.632 C	27.417	1447.4
141.8	143.70	34.079 D	-0.627 C	27.420	1447.5
142.8	144.65	34.085 D	-0.623 C	27.425	1447.5
143.8	145.60	34.088 D	-0.617 C	27.427	1447.6
144.8	146.75	34.095 D	-0.614 C	27.433	1447.6
145.8	147.70	34.107 D	-0.607 C	27.442	1447.7
146.8	148.65	34.116 D	-0.602 C	27.449	1447.7
147.8	149.80	34.121 D	-0.596 C	27.453	1447.8
148.8	150.70	34.125 D	-0.593 C	27.455	1447.8
149.8	151.80	34.128 D	-0.589 C	27.458	1447.9
150.8	152.85	34.139 D	-0.576 C	27.466	1447.9
151.8	153.90	34.150 D	-0.566 C	27.475	1448.0
152.8	154.80	34.156 D	-0.563 C	27.480	1448.1
153.8	155.85	34.163 D	-0.557 C	27.485	1448.1
154.8	156.95	34.168 D	-0.553 C	27.489	1448.2
155.8	157.90	34.171 D	-0.548 C	27.491	1448.2
156.8	158.95	34.176 D	-0.544 C	27.495	1448.2
157.8	159.90	34.184 D	-0.538 C	27.502	1448.3
158.8	160.80	34.195 D	-0.529 C	27.510	1448.4
159.8	161.90	34.202 D	-0.519 C	27.515	1448.4
160.8	163.10	34.221 D	-0.505 C	27.529	1448.6
161.8	164.10	34.232 D	-0.495 C	27.538	1448.6
162.8	165.00	34.236 D	-0.490 C	27.541	1448.7
163.8	166.10	34.244 D	-0.483 C	27.548	1448.7
164.8	167.10	34.252 D	-0.474 C	27.554	1448.8
165.8	168.10	34.257 D	-0.468 C	27.557	1448.9
166.8	169.15	34.271 D	-0.458 C	27.568	1448.9
167.8	170.20	34.273 D	-0.455 C	27.569	1449.0
168.8	171.30	34.283 D	-0.448 C	27.577	1449.0
169.8	172.05	34.286 D	-0.444 C	27.580	1449.1
170.8	173.15	34.289 D	-0.442 C	27.582	1449.1
171.8	174.05	34.295 D	-0.435 C	27.587	1449.2
172.8	175.20	34.301 D	-0.428 C	27.591	1449.2
173.8	176.35	34.307 D	-0.425 C	27.596	1449.3
174.8	177.10	34.313 D	-0.415 C	27.600	1449.3
175.8	178.25	34.320 D	-0.400 C	27.605	1449.4
176.8	179.30	34.330 D	-0.389 C	27.612	1449.5
177.8	180.30	34.341 D	-0.382 C	27.621	1449.6
178.8	181.35	34.350 D	-0.371 C	27.628	1449.7
179.8	182.25	34.361 D	-0.357 C	27.636	1449.7
180.8	183.40	34.370 D	-0.354 C	27.643	1449.8
181.8	184.40	34.374 D	-0.342 C	27.646	1449.9
182.8	185.30	34.380 D	-0.341 C	27.651	1449.9
183.8	186.45	34.388 D	-0.327 C	27.657	1450.0
184.8	187.40	34.398 D	-0.316 C	27.664	1450.1
185.8	188.40	34.402 D	-0.311 C	27.667	1450.1
186.8	189.45	34.411 D	-0.298 C	27.674	1450.2
187.8	190.50	34.422 D	-0.274 C	27.682	1450.4
188.8	191.60	34.440 D	-0.260 C	27.695	1450.5
189.8	192.40	34.452 D	-0.252 C	27.705	1450.5
190.8	193.50	34.456 D	-0.240 C	27.708	1450.6
191.8	194.55	34.462 D	-0.237 C	27.712	1450.6
192.8	195.65	34.463 D	-0.233 C	27.713	1450.7
193.8	196.70	34.471 D	-0.224 C	27.719	1450.8
194.8	197.65	34.484 D	-0.203 C	27.728	1450.9
195.8	198.55	34.489 D	-0.193 C	27.732	1450.9
196.8	199.65	34.506 D	-0.185 C	27.746	1451.0
197.8	200.55	34.512 D	-0.183 C	27.750	1451.1
198.8	201.80	34.517 D	-0.180 C	27.754	1451.1
199.8	202.75	34.518 D	-0.174 C	27.754	1451.1
200.8	203.80	34.521 D	-0.172 C	27.757	1451.2
201.8	204.65	34.525 D	-0.171 C	27.760	1451.2



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
202.8	205.85	34.526 D	-0.161 C	27.760	1451.3
203.8	206.65	34.532 D	-0.156 C	27.765	1451.3
204.8	207.95	34.538 D	-0.154 C	27.770	1451.4
205.8	208.65	34.541 D	-0.152 C	27.772	1451.4
206.8	209.85	34.541 D	-0.150 C	27.772	1451.4
207.8	210.90	34.544 D	-0.149 C	27.774	1451.4
208.8	211.90	34.546 D	-0.145 C	27.775	1451.5
209.8	212.85	34.547 D	-0.144 C	27.776	1451.5
210.8	213.75	34.545 D	-0.142 C	27.775	1451.5
211.8	214.95	34.548 D	-0.139 C	27.777	1451.6
212.8	215.90	34.552 D	-0.138 C	27.781	1451.6
213.8	217.05	34.552 D	-0.134 C	27.780	1451.6
214.8	218.00	34.557 D	-0.127 C	27.784	1451.7
215.8	219.95	34.561 D	-0.124 C	27.786	1451.7
216.8	220.05	34.563 D	-0.114 C	27.788	1451.8
217.8	221.15	34.577 D	-0.093 C	27.798	1451.9
218.8	222.15	34.588 D	-0.082 C	27.807	1452.0
219.8	223.05	34.598 D	-0.068 C	27.814	1452.1
220.8	224.05	34.603 D	-0.063 C	27.818	1452.1
221.8	225.25	34.604 D	-0.061 C	27.818	1452.2
222.8	226.15	34.605 D	-0.055 C	27.819	1452.2
223.8	227.15	34.610 D	-0.052 C	27.823	1452.2
224.8	228.15	34.613 D	-0.048 C	27.825	1452.3
225.8	229.15	34.618 D	-0.044 C	27.829	1452.3
226.8	230.20	34.620 D	-0.036 C	27.830	1452.4
227.8	231.20	34.624 D	-0.030 C	27.833	1452.4
228.8	232.25	34.628 D	-0.029 C	27.836	1452.4
229.8	233.35	34.633 D	-0.025 C	27.840	1452.5
230.8	234.30	34.634 D	-0.023 C	27.841	1452.5
231.8	235.35	34.634 D	-0.022 C	27.841	1452.5
232.8	236.35	34.633 D	-0.020 C	27.839	1452.6
233.8	237.45	34.642 D	-0.009 C	27.847	1452.6
234.8	238.30	34.647 D	-0.005 C	27.850	1452.7
235.8	239.40	34.650 D	-0.003 C	27.853	1452.7
236.8	240.35	34.655 D	0.011 C	27.856	1452.8
237.8	241.35	34.654 D	0.016 C	27.855	1452.8
238.8	242.55	34.656 D	0.019 C	27.856	1452.9
239.8	243.50	34.658 D	0.023 C	27.858	1452.9
240.8	244.40	34.662 D	0.033 C	27.860	1453.0
241.8	245.55	34.669 D	0.041 C	27.866	1453.0
242.8	246.55	34.675 D	0.053 C	27.870	1453.1
243.8	247.55	34.681 D	0.060 C	27.874	1453.2
244.8	248.60	34.686 D	0.067 C	27.878	1453.2
245.8	249.60	34.691 D	0.070 C	27.882	1453.3
246.8	250.50	34.696 D	0.074 C	27.886	1453.3
247.8	251.45	34.696 D	0.076 C	27.885	1453.3
248.8	252.60	34.697 D	0.077 C	27.886	1453.4
249.8	253.65	34.701 D	0.077 C	27.889	1453.4
250.8	254.65	34.704 D	0.085 C	27.891	1453.4
251.8	255.60	34.707 D	0.087 C	27.893	1453.5
252.8	256.60	34.707 D	0.089 C	27.893	1453.5
253.8	257.80	34.708 D	0.090 C	27.894	1453.5
254.8	258.85	34.710 D	0.090 C	27.896	1453.5
255.8	259.65	34.710 D	0.091 C	27.896	1453.6
256.8	260.65	34.712 D	0.093 C	27.898	1453.6
257.8	261.80	34.711 D	0.095 C	27.897	1453.6
258.8	262.90	34.712 D	0.097 C	27.898	1453.6
259.8	263.75	34.717 D	0.099 C	27.901	1453.7
260.8	264.80	34.717 D	0.106 C	27.901	1453.7
261.8	265.95	34.723 D	0.105 C	27.906	1453.7
262.8	266.80	34.725 D	0.108 C	27.907	1453.8
263.8	267.80	34.725 D	0.112 C	27.907	1453.8
264.8	269.05	34.728 D	0.115 C	27.909	1453.8
265.8	269.90	34.730 D	0.117 C	27.910	1453.9
266.8	271.05	34.730 D	0.117 C	27.911	1453.9
267.8	271.95	34.731 D	0.118 C	27.912	1453.9
268.8	273.05	34.733 D	0.120 C	27.913	1453.9
269.8	274.10	34.733 D	0.122 C	27.913	1454.0
270.8	275.00	34.736 D	0.126 C	27.915	1454.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
271.8	276.10	34.738 D	0.128 C	27.916	1454.0
272.8	277.10	34.740 D	0.130 C	27.919	1454.1
273.8	278.20	34.740 D	0.131 C	27.918	1454.1
274.8	279.20	34.742 D	0.131 C	27.920	1454.1
275.8	280.25	34.742 D	0.133 C	27.920	1454.1
276.8	281.25	34.745 D	0.133 C	27.922	1454.2
277.8	282.20	34.745 D	0.136 C	27.922	1454.2
278.8	283.20	34.747 D	0.139 C	27.923	1454.2
279.8	284.25	34.747 D	0.139 C	27.924	1454.2
280.8	285.30	34.751 D	0.138 C	27.926	1454.3
281.8	286.35	34.752 D	0.140 C	27.927	1454.3
282.8	287.35	34.754 D	0.140 C	27.929	1454.3
283.8	288.40	34.756 D	0.144 C	27.931	1454.3
284.8	289.25	34.759 D	0.145 C	27.933	1454.4
285.8	290.35	34.758 D	0.145 C	27.932	1454.4
286.8	291.40	34.759 D	0.145 C	27.933	1454.4
287.8	292.20	34.757 D	0.146 C	27.931	1454.4
288.8	293.45	34.757 D	0.147 C	27.931	1454.4
289.8	294.25	34.759 D	0.146 C	27.933	1454.4
290.8	295.50	34.759 D	0.148 C	27.933	1454.5
291.8	296.30	34.760 D	0.149 C	27.934	1454.5
292.8	297.55	34.762 D	0.152 C	27.935	1454.5
293.8	298.35	34.766 D	0.154 C	27.938	1454.6
294.8	299.60	34.765 D	0.156 C	27.937	1454.6
295.8	300.55	34.767 D	0.157 C	27.939	1454.6
296.8	301.55	34.769 D	0.161 C	27.940	1454.6
297.8	302.50	34.773 D	0.163 C	27.943	1454.7
298.8	303.70	34.774 D	0.163 C	27.944	1454.7
299.8	304.50	34.774 D	0.165 C	27.944	1454.7
300.8	305.55	34.775 D	0.165 C	27.945	1454.7
301.8	306.65	34.775 D	0.166 C	27.944	1454.8
302.8	307.65	34.777 D	0.166 C	27.946	1454.8
303.8	308.75	34.775 D	0.167 C	27.945	1454.8
304.8	309.55	34.775 D	0.168 C	27.944	1454.8
305.8	310.65	34.777 D	0.168 C	27.946	1454.8
306.8	311.75	34.778 D	0.168 C	27.947	1454.9
307.8	312.80	34.778 D	0.167 C	27.947	1454.9
308.8	313.80	34.778 D	0.168 C	27.947	1454.9
309.8	314.70	34.778 D	0.169 C	27.947	1454.9
310.8	315.70	34.780 D	0.170 C	27.949	1454.9
311.8	316.85	34.782 D	0.173 C	27.950	1455.0
312.8	317.95	34.780 D	0.174 C	27.948	1455.0
313.8	318.80	34.784 D	0.174 C	27.951	1455.0
314.8	319.80	34.784 D	0.176 C	27.951	1455.0
315.8	321.00	34.784 D	0.178 C	27.951	1455.1
316.8	321.90	34.788 D	0.180 C	27.954	1455.1
317.8	322.80	34.790 D	0.182 C	27.955	1455.1
318.8	324.05	34.792 D	0.184 C	27.957	1455.2
319.8	324.95	34.793 D	0.187 C	27.958	1455.2
320.8	326.00	34.795 D	0.188 C	27.960	1455.2
321.8	327.00	34.797 D	0.191 C	27.961	1455.2
322.8	328.10	34.797 D	0.190 C	27.961	1455.3
323.8	329.00	34.796 D	0.192 C	27.960	1455.3
324.8	330.05	34.802 D	0.191 C	27.965	1455.3
325.8	331.20	34.800 D	0.192 C	27.964	1455.3
326.8	332.05	34.800 D	0.192 C	27.963	1455.3
327.8	333.15	34.801 D	0.192 C	27.964	1455.4
328.8	334.15	34.803 D	0.192 C	27.966	1455.4
329.8	335.10	34.804 D	0.199 C	27.966	1455.4

TEMPERATURE, C

-2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00

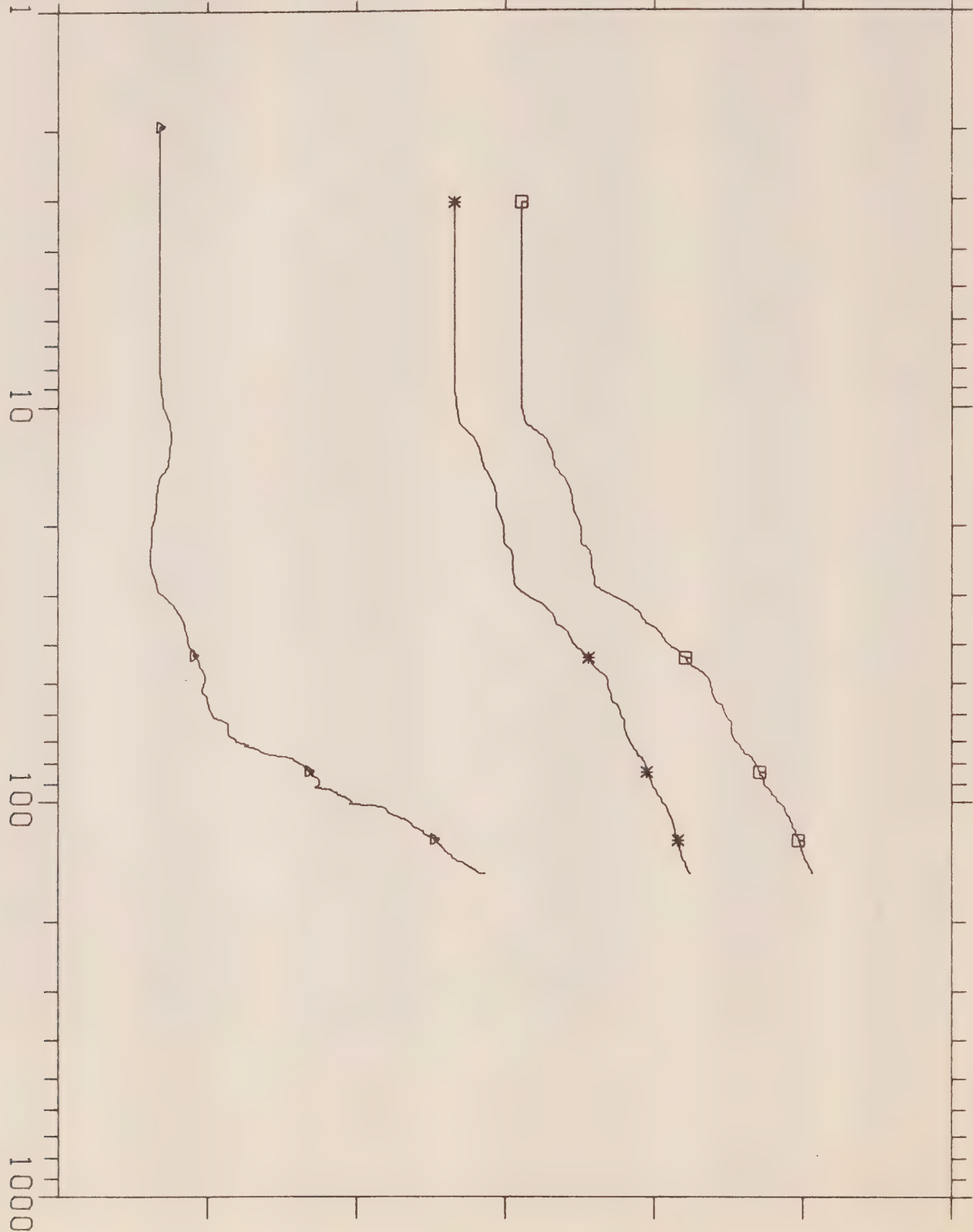
SALINITY ‰

24.00 26.00 28.00 30.00 32.00 34.00 36.00

SIGMAT

19.00 21.00 23.00 25.00 27.00 29.00 31.00

DEPTH M



CRUISE 15-76-015

EUKEKA SOUND-76

EXPER NO. 2030

LAT N.80-22-00

LONG W.86-47-00

WATER DEPTH 366

DEPTH INCR.

DATE 290376

LOCAL TIME 0955

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
3.0	1.95		-1.661 D		
4.0	3.05	30.218 E	-1.660 D	24.325	1434.9
5.0	3.80	30.216 E	-1.660 D	24.323	1434.9
6.0	5.00	30.215 E	-1.660 D	24.323	1434.9
7.0	6.00	30.216 E	-1.660 D	24.324	1434.9
8.0	7.10	30.219 E	-1.659 D	24.326	1435.0
9.0	7.85	30.221 E	-1.658 D	24.327	1435.0
10.0	9.00	30.221 E	-1.656 D	24.327	1435.0
11.0	9.95	30.227 E	-1.649 D	24.332	1435.1
12.0	11.05	30.282 E	-1.623 D	24.376	1435.3
13.0	12.05	30.541 E	-1.622 D	24.586	1435.7
14.0	13.05	30.636 E	-1.627 D	24.663	1435.8
15.0	14.15	30.670 E	-1.630 D	24.690	1435.9
16.0	15.20	30.810 E	-1.658 D	24.804	1435.9
17.0	16.15	30.872 E	-1.667 D	24.854	1436.0
18.0	17.00	30.892 E	-1.669 D	24.871	1436.0
19.0	18.15	30.913 E	-1.672 D	24.888	1436.1
20.0	19.10	30.978 E	-1.677 D	24.941	1436.1
21.0	20.15	31.017 E	-1.684 D	24.972	1436.2
22.0	21.25	31.022 E	-1.685 D	24.976	1436.2
23.0	22.15	31.027 E	-1.685 D	24.981	1436.2
24.0	23.20	31.150 E	-1.690 D	25.080	1436.4
25.0	24.30	31.165 E	-1.690 D	25.093	1436.4
26.0	25.25	31.167 E	-1.688 D	25.094	1436.5
27.0	26.25	31.170 E	-1.687 D	25.097	1436.5
28.0	27.25	31.195 E	-1.676 D	25.117	1436.6
29.0	28.35	31.209 E	-1.672 D	25.128	1436.6
30.0	29.30	31.297 E	-1.663 D	25.199	1436.8
31.0	30.40	31.455 E	-1.641 D	25.327	1437.2
32.0	31.40	31.648 E	-1.622 D	25.483	1437.6
33.0	32.40	31.745 E	-1.604 D	25.561	1437.8
34.0	33.30	31.823 E	-1.593 D	25.624	1438.0
35.0	34.35	31.862 E	-1.584 D	25.655	1438.1
36.0	35.50	31.904 E	-1.576 D	25.689	1438.2
37.0	36.30	32.023 E	-1.577 D	25.786	1438.4
38.0	37.30	32.087 E	-1.572 D	25.837	1438.5
39.0	38.30	32.118 E	-1.565 D	25.863	1438.6
40.0	39.50	32.175 E	-1.563 D	25.908	1438.7
41.0	40.30	32.216 E	-1.558 D	25.942	1438.8
42.0	41.40	32.316 E	-1.542 D	26.023	1439.0
43.0	42.50	32.351 E	-1.543 D	26.051	1439.1
44.0	43.30	32.425 E	-1.534 D	26.110	1439.3
45.0	44.55	32.485 E	-1.526 D	26.159	1439.4
46.0	45.35	32.526 E	-1.526 D	26.192	1439.5
47.0	46.40	32.595 E	-1.517 D	26.248	1439.6
48.0	47.50	32.673 E	-1.509 D	26.311	1439.8
49.0	48.40	32.724 E	-1.507 D	26.352	1439.9
50.0	49.55	32.753 E	-1.506 D	26.375	1440.0
51.0	50.45	32.764 E	-1.509 D	26.385	1440.0
52.0	51.60	32.770 E	-1.515 D	26.390	1440.0
53.0	52.55	32.780 E	-1.515 D	26.398	1440.0
54.0	53.70	32.801 E	-1.504 D	26.415	1440.1
55.0	54.55	32.817 E	-1.501 D	26.427	1440.1
56.0	55.70	32.843 E	-1.501 D	26.448	1440.2
57.0	56.55	32.898 E	-1.495 D	26.493	1440.3
58.0	57.75	32.930 E	-1.497 D	26.519	1440.4
59.0	58.65	32.946 E	-1.489 D	26.532	1440.5
60.0	59.60	32.967 E	-1.486 D	26.549	1440.5
61.0	60.80	32.975 E	-1.481 D	26.554	1440.6
62.0	61.65	33.010 E	-1.457 D	26.582	1440.7
63.0	62.75	33.037 E	-1.435 D	26.604	1440.9
64.0	63.85	33.041 E	-1.430 D	26.607	1441.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
65.0	64.70	33.043 E	-1.430 D	26.609	1441.0
66.0	65.85	33.045 E	-1.428 D	26.610	1441.0
67.0	66.70	33.046 E	-1.430 D	26.611	1441.0
68.0	67.90	33.056 E	-1.430 D	26.619	1441.0
69.0	68.75	33.078 E	-1.405 D	26.636	1441.2
70.0	69.90	33.103 E	-1.403 D	26.657	1441.3
71.0	71.00	33.143 E	-1.361 D	26.688	1441.5
72.0	71.90	33.158 E	-1.375 D	26.701	1441.5
73.0	72.90	33.188 E	-1.329 D	26.723	1441.8
74.0	74.00	33.204 E	-1.325 D	26.736	1441.8
75.0	75.05	33.222 E	-1.308 D	26.751	1442.0
76.0	76.15	33.270 E	-1.252 D	26.783	1442.3
77.0	77.15	33.330 E	-1.216 D	26.835	1442.6
78.0	78.10	33.339 E	-1.212 D	26.843	1442.6
79.0	79.10	33.357 E	-1.195 D	26.856	1442.8
80.0	80.05	33.381 E	-1.178 D	26.875	1442.9
81.0	81.05	33.394 E	-1.170 D	26.885	1443.0
82.0	82.00	33.400 E	-1.168 D	26.890	1443.0
83.0	83.00	33.415 E	-1.162 D	26.902	1443.1
84.0	84.05	33.422 E	-1.157 D	26.907	1443.1
85.0	85.10	33.429 E	-1.151 D	26.913	1443.2
86.0	86.20	33.458 E	-1.135 D	26.936	1443.3
87.0	87.35	33.470 E	-1.126 D	26.946	1443.4
88.0	88.35	33.483 E	-1.125 D	26.956	1443.4
89.0	89.25	33.483 E	-1.123 D	26.956	1443.4
90.0	90.20	33.489 E	-1.123 D	26.961	1443.5
91.0	91.15	33.514 E	-1.140 D	26.982	1443.4
92.0	92.20	33.531 E	-1.096 D	26.994	1443.7
93.0	93.20	33.556 E	-1.081 D	27.014	1443.8
94.0	94.20	33.574 E	-1.069 D	27.028	1443.9
95.0	95.30	33.578 E	-1.064 D	27.031	1443.9
96.0	96.35	33.611 E	-1.040 D	27.057	1444.1
97.0	97.45	33.636 E	-1.029 D	27.077	1444.2
98.0	98.50	33.657 E	-1.018 D	27.093	1444.3
99.0	99.45	33.668 E	-1.014 D	27.102	1444.4
100.0	100.35	33.690 D	-1.024 C	27.120	1444.4
101.0	101.50	33.714 D	-0.952 C	27.138	1444.8
102.0	102.45	33.741 D	-0.911 C	27.158	1445.0
103.0	103.45	33.756 D	-0.903 C	27.170	1445.1
104.0	104.60	33.768 D	-0.897 C	27.179	1445.1
105.0	105.50	33.776 D	-0.894 C	27.135	1445.2
106.0	106.60	33.788 D	-0.881 C	27.195	1445.3
107.0	107.55	33.800 D	-0.870 C	27.204	1445.4
108.0	108.65	33.815 D	-0.855 C	27.215	1445.5
109.0	109.65	33.825 D	-0.843 C	27.223	1445.6
110.0	110.60	33.839 D	-0.832 C	27.234	1445.6
111.0	111.70	33.846 D	-0.826 C	27.239	1445.7
112.0	112.70	33.851 D	-0.817 C	27.243	1445.8
113.0	113.65	33.862 D	-0.813 C	27.252	1445.8
114.0	114.70	33.865 D	-0.810 C	27.255	1445.8
115.0	115.75	33.869 D	-0.807 C	27.257	1445.9
116.0	116.75	33.882 D	-0.791 C	27.268	1446.0
117.0	117.60	33.894 D	-0.780 C	27.277	1446.1
118.0	118.65	33.905 D	-0.777 C	27.285	1446.1
119.0	119.65	33.906 D	-0.776 C	27.286	1446.1
120.0	120.65	33.910 D	-0.772 C	27.289	1446.2
121.0	121.90	33.928 D	-0.749 C	27.303	1446.3
122.0	122.75	33.941 D	-0.739 C	27.313	1446.4
123.0	123.85	33.948 D	-0.739 C	27.318	1446.4
124.0	124.90	33.949 D	-0.734 C	27.319	1446.5
125.0	125.85	33.956 D	-0.728 C	27.325	1446.5
126.0	127.00	33.960 D	-0.724 C	27.327	1446.6
127.0	128.05	33.972 D	-0.716 C	27.337	1446.7
128.0	129.10	33.976 D	-0.714 C	27.340	1446.7
129.0	129.95	33.977 D	-0.710 C	27.341	1446.7
130.0	131.00	33.982 D	-0.706 C	27.345	1446.8
131.0	132.05	33.988 D	-0.703 C	27.350	1446.8
132.0	133.00	33.992 D	-0.693 C	27.353	1446.8
133.0	134.00	33.999 D	-0.693 C	27.358	1446.9

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
134.0	134.95	34.005 D	-0.686 C	27.363	1447.0
135.0	135.95	34.010 D	-0.682 C	27.367	1447.0
136.0	137.00	34.013 D	-0.681 C	27.369	1447.0
137.0	138.00	34.021 D	-0.672 C	27.375	1447.1
138.0	139.10	34.032 D	-0.664 C	27.383	1447.2
139.0	140.30	34.043 D	-0.657 C	27.392	1447.2
140.0	141.30	34.061 D	-0.644 C	27.407	1447.3
141.0	142.15	34.068 D	-0.640 C	27.412	1447.4
142.0	143.15	34.080 D	-0.628 C	27.421	1447.5
143.0	144.15	34.085 D	-0.625 C	27.425	1447.5
144.0	145.20	34.087 D	-0.622 C	27.426	1447.5
145.0	146.30	34.097 D	-0.614 C	27.434	1447.6
146.0	147.25	34.106 D	-0.607 C	27.441	1447.7
147.0	148.35	34.115 D	-0.600 C	27.448	1447.7
148.0	149.45	34.124 D	-0.594 C	27.455	1447.8
149.0	150.40	34.128 D	-0.583 C	27.458	1447.9
150.0	151.35	34.146 D	-0.571 C	27.472	1448.0

TEMPERATURE, C

△ -2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00

SALINITY ‰

□ 24.00 26.00 28.00 30.00 32.00 34.00 36.00

SIGMAT

\* 19.00 21.00 23.00 25.00 27.00 29.00 31.00

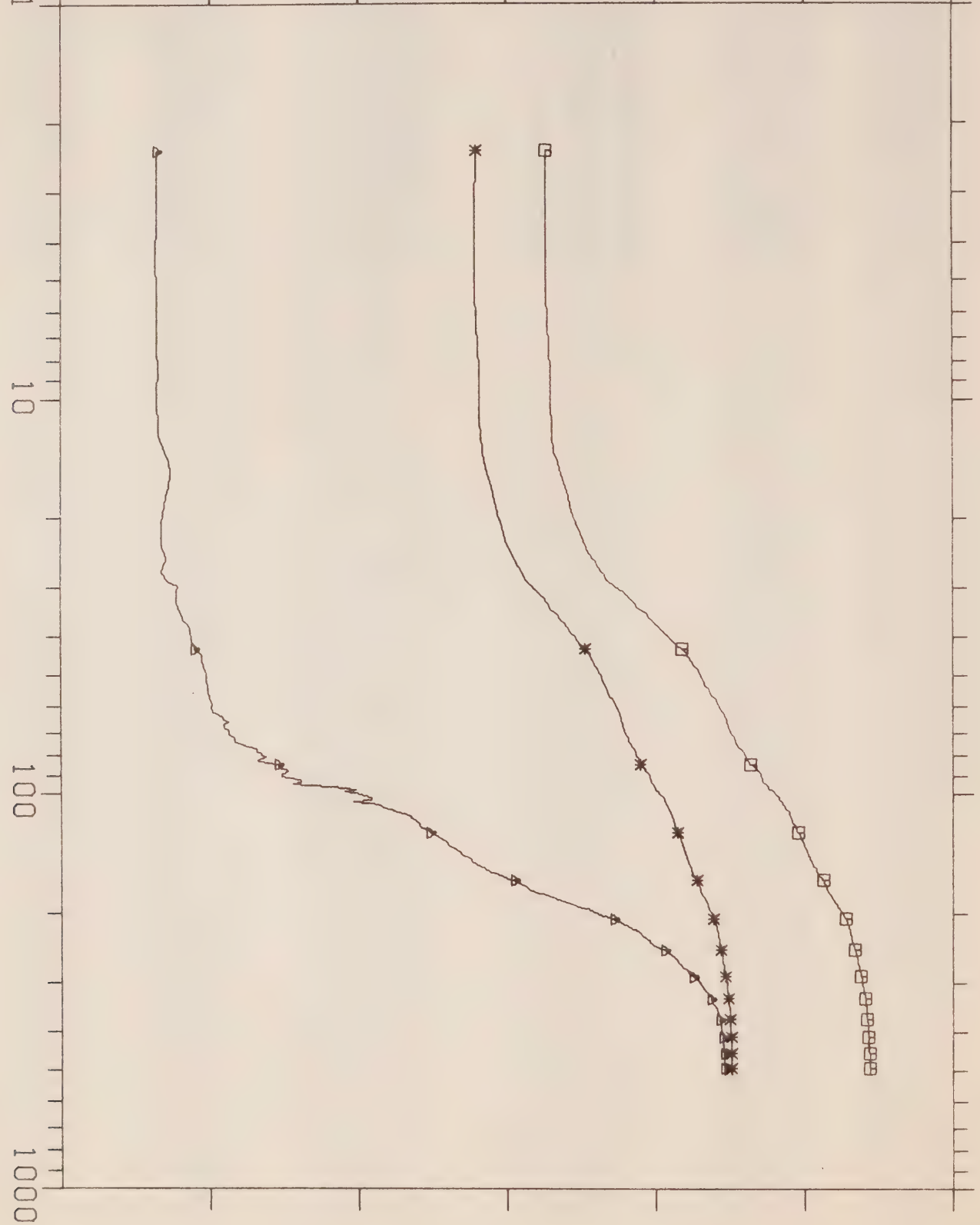
DEPTH M

10

100

1000

EXPERIMENT 2031





CRUISE 15-76-015

EUREKA SOUND-76

EXPER NO. 2031

LAT N.80-01-00

LONG W.86-58-00

WATER DEPTH 530

DEPTH INCR.

DATE 300376

LOCAL TIME 1145

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
2.8	2.35	30.549 E	-1.677 D	24.593	1435.3
3.8	3.45	30.541 E	-1.677 D	24.587	1435.3
4.8	4.55	30.540 E	-1.678 D	24.586	1435.3
5.8	5.30	30.542 E	-1.677 D	24.587	1435.3
6.8	6.45	30.560 E	-1.677 D	24.602	1435.4
7.8	7.35	30.584 E	-1.675 D	24.622	1435.4
8.8	8.55	30.597 E	-1.671 D	24.632	1435.5
9.8	9.50	30.600 E	-1.676 D	24.635	1435.5
10.8	10.45	30.607 E	-1.673 D	24.640	1435.5
11.8	11.45	30.613 E	-1.672 D	24.645	1435.5
12.8	12.35	30.623 E	-1.670 D	24.653	1435.6
13.8	13.55	30.645 E	-1.652 D	24.671	1435.7
14.8	14.45	30.690 E	-1.636 D	24.707	1435.9
15.8	15.45	30.742 E	-1.629 D	24.749	1436.0
16.8	16.65	30.800 E	-1.635 D	24.796	1436.1
17.8	17.60	30.834 E	-1.643 D	24.824	1436.1
18.8	18.65	30.870 E	-1.648 D	24.853	1436.1
19.8	19.65	30.897 E	-1.653 D	24.874	1436.2
20.8	20.60	30.947 E	-1.658 D	24.915	1436.2
21.8	21.75	30.993 E	-1.659 D	24.953	1436.3
22.8	22.70	31.035 E	-1.660 D	24.986	1436.4
23.8	23.70	31.076 E	-1.659 D	25.020	1436.4
24.8	24.65	31.120 E	-1.651 D	25.056	1436.6
25.8	25.55	31.180 E	-1.645 D	25.104	1436.7
26.8	26.65	31.237 E	-1.657 D	25.151	1436.7
27.8	27.55	31.302 E	-1.660 D	25.203	1436.8
28.8	28.65	31.364 E	-1.641 D	25.253	1437.0
29.8	29.75	31.465 E	-1.607 D	25.334	1437.3
30.8	30.70	31.575 E	-1.611 D	25.423	1437.5
31.8	31.75	31.643 E	-1.612 D	25.479	1437.6
32.8	32.80	31.712 E	-1.610 D	25.534	1437.7
33.8	33.80	31.779 E	-1.607 D	25.588	1437.8
34.8	34.80	31.878 E	-1.595 D	25.668	1438.1
35.8	35.85	31.948 E	-1.591 D	25.725	1438.2
36.8	36.85	32.005 E	-1.577 D	25.771	1438.4
37.8	37.85	32.057 E	-1.563 D	25.813	1438.5
38.8	38.90	32.114 E	-1.565 D	25.859	1438.6
39.8	39.90	32.182 E	-1.562 D	25.914	1438.7
40.8	40.85	32.242 E	-1.559 D	25.963	1438.8
41.8	41.90	32.293 E	-1.549 D	26.004	1439.0
42.8	42.85	32.355 E	-1.548 D	26.054	1439.1
43.8	44.00	32.412 E	-1.532 D	26.100	1439.3
44.8	44.85	32.447 E	-1.527 D	26.128	1439.3
45.8	45.85	32.489 E	-1.525 D	26.162	1439.4
46.8	47.00	32.517 E	-1.519 D	26.185	1439.5
47.8	47.85	32.557 E	-1.519 D	26.217	1439.6
48.8	49.15	32.592 E	-1.511 D	26.245	1439.7
49.8	49.95	32.628 E	-1.512 D	26.274	1439.8
50.8	51.05	32.645 E	-1.510 D	26.288	1439.9
51.8	52.10	32.666 E	-1.508 D	26.305	1439.9
52.8	53.10	32.687 E	-1.507 D	26.322	1439.9
53.8	54.00	32.712 E	-1.506 D	26.342	1440.0
54.8	55.15	32.742 E	-1.503 D	26.366	1440.0
55.8	56.20	32.769 E	-1.501 D	26.388	1440.1
56.8	57.05	32.802 E	-1.501 D	26.415	1440.2
57.8	58.20	32.831 E	-1.496 D	26.439	1440.3
58.8	59.10	32.849 E	-1.490 D	26.453	1440.3
59.8	60.30	32.879 E	-1.497 D	26.477	1440.3
60.8	61.30	32.905 E	-1.489 D	26.498	1440.4
61.8	62.20	32.923 E	-1.483 D	26.513	1440.5
62.8	63.20	32.943 E	-1.458 D	26.529	1440.7
63.8	64.15	32.956 E	-1.455 D	26.539	1440.7

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
64.8	65.35	32.968 E	-1.434 D	26.548	1440.9
65.8	66.25	32.979 E	-1.454 D	26.557	1440.8
66.8	67.35	32.990 E	-1.450 D	26.566	1440.8
67.8	68.45	33.001 E	-1.441 D	26.575	1440.9
68.8	69.40	33.016 E	-1.435 D	26.537	1441.0
69.8	70.45	33.039 E	-1.433 D	26.605	1441.0
70.8	71.40	33.060 E	-1.419 D	26.622	1441.2
71.8	72.45	33.074 E	-1.414 D	26.633	1441.2
72.8	73.45	33.084 E	-1.414 D	26.641	1441.2
73.8	74.40	33.106 E	-1.389 D	26.659	1441.4
74.8	75.55	33.126 E	-1.370 D	26.674	1441.5
75.8	76.50	33.149 E	-1.345 D	26.692	1441.7
76.8	77.45	33.173 E	-1.338 D	26.712	1441.8
77.8	78.60	33.202 E	-1.331 D	26.734	1441.9
78.8	79.40	33.215 E	-1.324 D	26.745	1442.0
79.8	80.50	33.228 E	-1.308 D	26.755	1442.1
80.8	81.50	33.250 E	-1.340 D	26.774	1442.0
81.8	82.50	33.260 E	-1.334 D	26.782	1442.0
82.8	83.65	33.289 E	-1.272 D	26.804	1442.4
83.8	84.70	33.314 E	-1.267 D	26.824	1442.4
84.8	85.60	33.337 E	-1.272 D	26.842	1442.5
85.8	86.65	33.370 E	-1.235 D	26.868	1442.7
86.8	87.50	33.393 E	-1.245 D	26.886	1442.7
87.8	88.70	33.412 E	-1.254 D	26.903	1442.7
88.8	89.80	33.422 E	-1.262 D	26.911	1442.7
89.8	90.60	33.431 E	-1.234 D	26.918	1442.9
90.8	91.75	33.448 E	-1.201 D	26.930	1443.1
91.8	92.90	33.469 E	-1.194 D	26.947	1443.1
92.8	93.65	33.483 E	-1.224 D	26.959	1443.0
93.8	94.75	33.499 E	-1.169 D	26.971	1443.3
94.8	95.90	33.518 E	-1.084 D	26.983	1443.3
95.8	96.75	33.542 E	-1.011 D	27.000	1444.2
96.8	97.85	33.593 E	-1.052 D	27.043	1444.1
97.8	99.00	33.602 E	-1.011 D	27.049	1444.3
98.8	99.75	33.622 E	-0.994 D	27.064	1444.4
99.8	100.90	33.642 D	-0.981 C	27.080	1444.5
100.8	101.85	33.667 D	-0.957 C	27.100	1444.7
101.8	102.90	33.686 D	-0.955 C	27.115	1444.7
102.8	103.95	33.698 D	-1.022 C	27.126	1444.4
103.8	104.85	33.709 D	-0.958 C	27.133	1444.8
104.8	106.10	33.727 D	-0.930 C	27.147	1445.0
105.8	106.90	33.737 D	-0.924 C	27.155	1445.0
106.8	108.00	33.744 D	-0.919 C	27.160	1445.1
107.8	109.10	33.763 D	-0.896 C	27.175	1445.2
108.8	110.10	33.775 D	-0.879 C	27.184	1445.3
109.8	111.00	33.793 D	-0.869 C	27.198	1445.4
110.8	112.00	33.803 D	-0.841 C	27.205	1445.6
111.8	113.20	33.814 D	-0.820 C	27.213	1445.7
112.8	114.00	33.825 D	-0.825 C	27.222	1445.7
113.8	115.15	33.839 D	-0.810 C	27.233	1445.8
114.8	116.15	33.844 D	-0.806 C	27.237	1445.9
115.8	117.25	33.849 D	-0.802 C	27.241	1445.9
116.8	118.10	33.863 D	-0.789 C	27.252	1446.0
117.8	119.15	33.873 D	-0.793 C	27.260	1446.0
118.8	120.20	33.879 D	-0.791 C	27.265	1446.0
119.8	121.20	33.893 D	-0.781 C	27.276	1446.1
120.8	122.35	33.901 D	-0.763 C	27.282	1446.2
121.8	123.30	33.909 D	-0.761 C	27.288	1446.3
122.8	124.35	33.919 D	-0.759 C	27.296	1446.3
123.8	125.25	33.925 D	-0.756 C	27.301	1446.4
124.8	126.20	33.934 D	-0.750 C	27.308	1446.4
125.8	127.40	33.949 D	-0.733 C	27.319	1446.5
126.8	128.30	33.957 D	-0.728 C	27.326	1446.6
127.8	129.45	33.968 D	-0.719 C	27.334	1446.7
128.8	130.55	33.976 D	-0.708 C	27.340	1446.7
129.8	131.45	33.989 D	-0.703 C	27.350	1446.8
130.8	132.55	33.990 D	-0.700 C	27.351	1446.8
131.8	133.50	33.993 D	-0.699 C	27.353	1446.9
132.8	134.50	34.000 D	-0.697 C	27.359	1446.9



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
133.8	135.40	34.006 D	-0.688 C	27.363	1447.0
134.8	136.45	34.017 D	-0.681 C	27.372	1447.0
135.8	137.55	34.026 D	-0.670 C	27.379	1447.1
136.8	138.45	34.037 D	-0.663 C	27.387	1447.2
137.8	139.65	34.045 D	-0.657 C	27.394	1447.2
138.8	140.65	34.052 D	-0.656 C	27.400	1447.3
139.8	141.65	34.056 D	-0.652 C	27.402	1447.3
140.8	142.75	34.069 D	-0.640 C	27.413	1447.4
141.8	143.65	34.074 D	-0.638 C	27.416	1447.4
142.8	144.75	34.079 D	-0.627 C	27.420	1447.5
143.8	145.55	34.090 D	-0.620 C	27.429	1447.6
144.8	146.65	34.097 D	-0.619 C	27.434	1447.6
145.8	147.70	34.101 D	-0.613 C	27.437	1447.6
146.8	148.75	34.107 D	-0.609 C	27.442	1447.7
147.8	149.90	34.115 D	-0.607 C	27.448	1447.7
148.8	150.70	34.120 D	-0.602 C	27.452	1447.8
149.8	151.80	34.128 D	-0.586 C	27.458	1447.9
150.8	152.75	34.140 D	-0.578 C	27.467	1447.9
151.8	153.85	34.150 D	-0.575 C	27.475	1448.0
152.8	154.90	34.159 D	-0.567 C	27.483	1448.0
153.8	155.75	34.167 D	-0.559 C	27.489	1448.1
154.8	156.95	34.176 D	-0.551 C	27.496	1448.2
155.8	158.00	34.178 D	-0.538 C	27.497	1448.3
156.8	158.95	34.188 D	-0.532 C	27.505	1448.3
157.8	160.00	34.199 D	-0.521 C	27.512	1448.4
158.8	161.00	34.207 D	-0.515 C	27.519	1448.5
159.8	162.05	34.222 D	-0.503 C	27.530	1448.5
160.8	163.00	34.232 D	-0.497 C	27.538	1448.6
161.8	163.90	34.245 D	-0.486 C	27.548	1448.7
162.8	165.05	34.255 D	-0.476 C	27.556	1448.8
163.8	165.95	34.259 D	-0.468 C	27.559	1448.8
164.8	167.20	34.269 D	-0.454 C	27.566	1448.9
165.8	168.15	34.286 D	-0.448 C	27.580	1449.0
166.8	169.15	34.287 D	-0.444 C	27.580	1449.0
167.8	170.05	34.294 D	-0.441 C	27.586	1449.1
168.8	171.05	34.298 D	-0.436 C	27.589	1449.1
169.8	172.05	34.302 D	-0.432 C	27.592	1449.2
170.8	173.15	34.307 D	-0.426 C	27.596	1449.2
171.8	174.30	34.315 D	-0.418 C	27.602	1449.3
172.8	175.30	34.320 D	-0.413 C	27.606	1449.3
173.8	176.35	34.325 D	-0.401 C	27.609	1449.4
174.8	177.40	34.332 D	-0.391 C	27.614	1449.5
175.8	178.35	34.342 D	-0.379 C	27.622	1449.6
176.8	179.30	34.351 D	-0.367 C	27.629	1449.6
177.8	180.45	34.362 D	-0.352 C	27.637	1449.7
178.8	181.45	34.373 D	-0.343 C	27.645	1449.8
179.8	182.35	34.382 D	-0.334 C	27.652	1449.9
180.8	183.40	34.390 D	-0.329 C	27.659	1449.9
181.8	184.30	34.398 D	-0.320 C	27.665	1450.0
182.8	185.35	34.407 D	-0.310 C	27.671	1450.1
183.8	186.55	34.418 D	-0.295 C	27.679	1450.2
184.8	187.50	34.429 D	-0.288 C	27.688	1450.2
185.8	188.40	34.436 D	-0.282 C	27.694	1450.3
186.8	189.35	34.441 D	-0.273 C	27.697	1450.4
187.8	190.50	34.449 D	-0.263 C	27.703	1450.4
188.8	191.65	34.456 D	-0.258 C	27.708	1450.5
189.8	192.55	34.459 D	-0.252 C	27.710	1450.5
190.8	193.65	34.463 D	-0.240 C	27.713	1450.6
191.8	194.70	34.470 D	-0.229 C	27.719	1450.7
192.8	195.70	34.478 D	-0.217 C	27.724	1450.8
193.8	196.65	34.491 D	-0.209 C	27.734	1450.8
194.8	197.65	34.503 D	-0.205 C	27.744	1450.9
195.8	198.65	34.511 D	-0.200 C	27.750	1451.0
196.8	199.75	34.516 D	-0.196 C	27.754	1451.0
197.8	200.65	34.525 D	-0.184 C	27.750	1451.1
198.8	201.60	34.532 D	-0.173 C	27.766	1451.2
199.8	202.80	34.537 D	-0.164 C	27.769	1451.2
200.8	203.80	34.545 D	-0.158 C	27.775	1451.3
201.8	204.70	34.547 D	-0.153 C	27.777	1451.3



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
202.8	205.80	34.550 D	-0.141 C	27.779	1451.4
203.8	206.90	34.559 D	-0.135 C	27.785	1451.5
204.8	207.95	34.564 D	-0.128 C	27.790	1451.5
205.8	208.90	34.571 D	-0.123 C	27.795	1451.6
206.8	210.00	34.572 D	-0.117 C	27.795	1451.6
207.8	211.00	34.577 D	-0.114 C	27.799	1451.6
208.8	211.90	34.583 D	-0.111 C	27.804	1451.7
209.8	212.85	34.585 D	-0.103 C	27.805	1451.7
210.8	214.05	34.590 D	-0.097 C	27.809	1451.3
211.8	215.10	34.593 D	-0.091 C	27.811	1451.3
212.8	215.95	34.595 D	-0.088 C	27.815	1451.3
213.8	216.95	34.603 D	-0.080 C	27.819	1451.9
214.8	218.15	34.609 D	-0.073 C	27.823	1452.0
215.8	219.10	34.610 D	-0.067 C	27.824	1452.0
216.8	220.10	34.617 D	-0.063 C	27.829	1452.1
217.8	221.00	34.618 D	-0.061 C	27.830	1452.1
218.8	222.00	34.622 D	-0.055 C	27.833	1452.2
219.8	223.20	34.623 D	-0.051 C	27.833	1452.2
220.8	224.20	34.627 D	-0.050 C	27.836	1452.2
221.8	225.05	34.629 D	-0.049 C	27.838	1452.2
222.8	226.35	34.629 D	-0.046 C	27.838	1452.3
223.8	227.15	34.635 D	-0.045 C	27.842	1452.3
224.8	228.30	34.635 D	-0.038 C	27.842	1452.4
225.8	229.30	34.640 D	-0.034 C	27.846	1452.4
226.8	230.35	34.642 D	-0.030 C	27.847	1452.4
227.8	231.20	34.646 D	-0.029 C	27.850	1452.5
228.8	232.35	34.648 D	-0.025 C	27.852	1452.5
229.8	233.40	34.649 D	-0.022 C	27.853	1452.5
230.8	234.35	34.649 D	-0.020 C	27.853	1452.6
231.8	235.45	34.653 D	-0.020 C	27.856	1452.6
232.8	236.40	34.656 D	-0.017 C	27.858	1452.6
233.8	237.30	34.659 D	-0.015 C	27.860	1452.6
234.8	238.35	34.660 D	-0.010 C	27.861	1452.7
235.8	239.55	34.661 D	-0.003 C	27.862	1452.7
236.8	240.50	34.668 D	-0.003 C	27.867	1452.8
237.8	241.50	34.670 D	0.001 C	27.868	1452.8
238.8	242.35	34.675 D	0.005 C	27.872	1452.8
239.8	243.50	34.676 D	0.011 C	27.873	1452.9
240.8	244.60	34.677 D	0.022 C	27.873	1453.0
241.8	245.50	34.679 D	0.026 C	27.874	1453.0
242.8	246.45	34.683 D	0.032 C	27.877	1453.0
243.8	247.55	34.685 D	0.035 C	27.879	1453.1
244.8	248.65	34.689 D	0.037 C	27.882	1453.1
245.8	249.55	34.689 D	0.039 C	27.882	1453.1
246.8	250.50	34.692 D	0.045 C	27.884	1453.2
247.8	251.75	34.696 D	0.047 C	27.887	1453.2
248.8	252.70	34.701 D	0.051 C	27.891	1453.3
249.8	253.80	34.702 D	0.054 C	27.892	1453.3
250.8	254.70	34.706 D	0.057 C	27.894	1453.3
251.8	255.55	34.709 D	0.062 C	27.897	1453.4
252.8	256.80	34.710 D	0.063 C	27.898	1453.4
253.8	257.80	34.710 D	0.064 C	27.897	1453.4
254.8	258.70	34.712 D	0.064 C	27.899	1453.4
255.8	259.90	34.711 D	0.066 C	27.898	1453.5
256.8	260.90	34.716 D	0.070 C	27.902	1453.5
257.8	261.80	34.718 D	0.072 C	27.904	1453.5
258.8	262.95	34.718 D	0.073 C	27.904	1453.5
259.8	264.00	34.719 D	0.075 C	27.905	1453.5
260.8	264.90	34.721 D	0.077 C	27.906	1453.6
261.8	265.80	34.724 D	0.079 C	27.908	1453.6
262.8	266.95	34.725 D	0.081 C	27.909	1453.7
263.8	268.10	34.727 D	0.083 C	27.910	1453.7
264.8	269.05	34.728 D	0.086 C	27.911	1453.7
265.8	269.95	34.732 D	0.086 C	27.914	1453.7
266.8	271.05	34.732 D	0.088 C	27.914	1453.8
267.8	272.10	34.731 D	0.091 C	27.913	1453.8
268.8	273.15	34.734 D	0.093 C	27.915	1453.8
269.8	274.10	34.736 D	0.095 C	27.917	1453.9
270.8	275.25	34.738 D	0.098 C	27.918	1453.9

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
271.8	276.20	34.742 D	0.100 C	27.922	1453.9
272.8	277.00	34.744 D	0.103 C	27.923	1453.9
273.8	278.10	34.745 D	0.107 C	27.923	1454.0
274.8	279.30	34.747 D	0.109 C	27.925	1454.0
275.8	280.10	34.750 D	0.110 C	27.927	1454.0
276.8	281.25	34.751 D	0.112 C	27.928	1454.1
277.8	282.25	34.753 D	0.114 C	27.929	1454.1
278.8	283.30	34.754 D	0.116 C	27.930	1454.1
279.8	284.30	34.756 D	0.113 C	27.931	1454.2
280.8	285.25	34.757 D	0.120 C	27.932	1454.2
281.8	286.25	34.762 D	0.123 C	27.936	1454.2
282.8	287.35	34.763 D	0.127 C	27.937	1454.3
283.8	288.50	34.766 D	0.130 C	27.940	1454.3
284.8	289.40	34.769 D	0.131 C	27.942	1454.3
285.8	290.45	34.768 D	0.134 C	27.940	1454.3
286.8	291.30	34.770 D	0.134 C	27.942	1454.4
287.8	292.55	34.772 D	0.138 C	27.944	1454.4
288.8	293.45	34.775 D	0.140 C	27.946	1454.4
289.8	294.50	34.778 D	0.142 C	27.948	1454.5
290.8	295.40	34.779 D	0.143 C	27.949	1454.5
291.8	296.45	34.780 D	0.144 C	27.950	1454.5
292.8	297.55	34.783 D	0.146 C	27.952	1454.5
293.8	298.65	34.784 D	0.146 C	27.952	1454.6
294.8	299.45	34.785 D	0.149 C	27.954	1454.6
295.8	300.50	34.785 D	0.151 C	27.954	1454.6
296.8	301.65	34.787 D	0.151 C	27.955	1454.6
297.8	302.65	34.787 D	0.153 C	27.955	1454.7
298.8	303.55	34.789 D	0.154 C	27.956	1454.7
299.8	304.60	34.789 D	0.156 C	27.956	1454.7
300.8	305.75	34.791 D	0.157 C	27.958	1454.7
301.8	306.75	34.794 D	0.159 C	27.960	1454.8
302.8	307.80	34.792 D	0.161 C	27.959	1454.8
303.8	308.80	34.793 D	0.161 C	27.959	1454.8
304.8	309.70	34.796 D	0.162 C	27.961	1454.8
305.8	310.70	34.796 D	0.163 C	27.961	1454.8
306.8	311.70	34.800 D	0.165 C	27.965	1454.9
307.8	312.65	34.800 D	0.167 C	27.964	1454.9
308.8	313.75	34.801 D	0.169 C	27.965	1454.9
309.8	315.00	34.804 D	0.170 C	27.967	1455.0
310.8	315.95	34.804 D	0.174 C	27.967	1455.0
311.8	316.85	34.808 D	0.173 C	27.970	1455.0
312.8	317.95	34.807 D	0.174 C	27.970	1455.0
313.8	318.80	34.809 D	0.176 C	27.971	1455.1
314.8	320.10	34.811 D	0.177 C	27.973	1455.1
315.8	321.05	34.811 D	0.180 C	27.973	1455.1
316.8	322.00	34.814 D	0.181 C	27.975	1455.1
317.8	323.05	34.814 D	0.183 C	27.975	1455.2
318.8	324.00	34.815 D	0.183 C	27.976	1455.2
319.8	324.95	34.816 D	0.184 C	27.976	1455.2
320.8	326.20	34.817 D	0.185 C	27.977	1455.2
321.8	327.20	34.817 D	0.186 C	27.977	1455.3
322.8	328.10	34.819 D	0.186 C	27.979	1455.3
323.8	329.15	34.818 D	0.186 C	27.978	1455.3
324.8	330.10	34.818 D	0.187 C	27.978	1455.3
325.8	331.20	34.819 D	0.189 C	27.979	1455.3
326.8	332.20	34.819 D	0.190 C	27.979	1455.4
327.8	333.15	34.821 D	0.190 C	27.981	1455.4
328.8	334.40	34.821 D	0.191 C	27.980	1455.4
329.8	335.35	34.821 D	0.192 C	27.980	1455.4
330.8	336.20	34.824 D	0.191 C	27.983	1455.4
331.8	337.25	34.825 D	0.192 C	27.983	1455.5
332.8	338.45	34.824 D	0.194 C	27.982	1455.5
333.8	339.40	34.825 D	0.195 C	27.983	1455.5
334.8	340.40	34.826 D	0.196 C	27.984	1455.5
335.8	341.30	34.826 D	0.198 C	27.984	1455.5
336.8	342.35	34.827 D	0.199 C	27.985	1455.5
337.8	343.45	34.832 D	0.198 C	27.988	1455.5
338.8	344.40	34.831 D	0.199 C	27.988	1455.5
339.8	345.35	34.833 D	0.203 C	27.990	1455.5



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
340.8	346.45	34.834 D	0.204 C	27.990	1455.7
341.8	347.60	34.835 D	0.204 C	27.991	1455.7
342.8	348.60	34.834 D	0.206 C	27.990	1455.7
343.8	349.50	34.835 D	0.206 C	27.990	1455.7
344.8	350.45	34.837 D	0.206 C	27.992	1455.8
345.8	351.60	34.837 D	0.207 C	27.992	1455.8
346.8	352.65	34.836 D	0.208 C	27.992	1455.8
347.8	353.60	34.838 D	0.207 C	27.993	1455.8
348.8	354.65	34.837 D	0.209 C	27.992	1455.8
349.8	355.50	34.839 D	0.210 C	27.994	1455.9
350.8	356.75	34.839 D	0.211 C	27.994	1455.9
351.8	357.75	34.841 D	0.211 C	27.995	1455.9
352.8	358.70	34.842 D	0.210 C	27.996	1455.9
353.8	359.60	34.841 D	0.210 C	27.996	1455.9
354.8	360.65	34.842 D	0.211 C	27.996	1455.9
355.8	361.85	34.843 D	0.212 C	27.997	1456.0
356.8	362.85	34.843 D	0.213 C	27.997	1456.0
357.8	363.85	34.844 D	0.213 C	27.997	1456.0
358.8	364.90	34.846 D	0.213 C	27.999	1456.0
359.8	365.90	34.847 D	0.213 C	28.000	1456.1
360.8	366.80	34.849 D	0.213 C	28.002	1456.1
361.8	367.90	34.846 D	0.215 C	27.999	1456.1
362.8	369.00	34.847 D	0.214 C	28.000	1456.1
363.8	369.90	34.847 D	0.215 C	28.000	1456.1
364.8	370.80	34.849 D	0.214 C	28.001	1456.1
365.8	372.05	34.849 D	0.214 C	28.002	1456.2
366.8	373.10	34.849 D	0.215 C	28.001	1456.2
367.8	374.00	34.847 D	0.216 C	28.000	1456.2
368.8	374.95	34.849 D	0.215 C	28.002	1456.2
369.8	376.10	34.849 D	0.216 C	28.001	1456.2
370.8	377.10	34.851 D	0.216 C	28.003	1456.3
371.8	378.10	34.851 D	0.217 C	28.003	1456.3
372.8	379.15	34.851 D	0.218 C	28.003	1456.3
373.8	380.10	34.850 D	0.219 C	28.002	1456.3
374.8	381.15	34.851 D	0.219 C	28.003	1456.3
375.8	382.15	34.852 D	0.219 C	28.004	1456.4
376.8	383.10	34.852 D	0.220 C	28.003	1456.4
377.8	384.10	34.855 D	0.219 C	28.006	1456.4
378.8	385.15	34.854 D	0.219 C	28.006	1456.4
379.8	386.30	34.854 D	0.219 C	28.005	1456.4
380.8	387.30	34.853 D	0.220 C	28.005	1456.4
381.8	388.25	34.856 D	0.220 C	28.007	1456.5
382.8	389.30	34.855 D	0.220 C	28.006	1456.5
383.8	390.35	34.857 D	0.220 C	28.008	1456.5
384.8	391.35	34.856 D	0.221 C	28.006	1456.5
385.8	392.40	34.856 D	0.221 C	28.007	1456.5
386.8	393.30	34.858 D	0.220 C	28.009	1456.5
387.8	394.40	34.856 D	0.222 C	28.006	1456.6
388.8	395.45	34.856 D	0.222 C	28.007	1456.6
389.8	396.45	34.859 D	0.220 C	28.010	1456.6
390.8	397.40	34.858 D	0.222 C	28.008	1456.6
391.8	398.45	34.859 D	0.222 C	28.009	1456.6
392.8	399.55	34.858 D	0.223 C	28.009	1456.7
393.8	400.55	34.859 D	0.223 C	28.009	1456.7
394.8	401.60	34.859 D	0.223 C	28.009	1456.7
395.8	402.60	34.860 D	0.223 C	28.010	1456.7
396.8	403.55	34.860 D	0.222 C	28.010	1456.7
397.8	404.55	34.860 D	0.223 C	28.010	1456.7
398.8	405.50	34.861 D	0.223 C	28.010	1456.8
399.8	406.55	34.860 D	0.224 C	28.010	1456.8
400.8	407.65	34.860 D	0.225 C	28.010	1456.8
401.8	408.80	34.860 D	0.224 C	28.010	1456.8
402.8	409.80	34.861 D	0.224 C	28.011	1456.8
403.8	410.70	34.864 D	0.224 C	28.013	1456.9
404.8	411.70	34.862 D	0.225 C	28.011	1456.9
405.8	412.80	34.861 D	0.225 C	28.011	1456.9
406.8	413.65	34.864 D	0.225 C	28.013	1456.9
407.8	414.85	34.862 D	0.226 C	28.011	1456.9
408.8	415.90	34.864 D	0.225 C	28.013	1457.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
409.8	416.90	34.863 D	0.226 C	28.012	1457.0
410.8	417.95	34.864 D	0.226 C	28.013	1457.0
411.8	419.00	34.866 D	0.225 C	28.015	1457.0
412.8	419.90	34.863 D	0.227 C	28.012	1457.0
413.8	420.85	34.865 D	0.226 C	28.014	1457.0
414.8	421.80	34.866 D	0.226 C	28.015	1457.1
415.8	422.85	34.867 D	0.225 C	28.015	1457.1
416.8	423.95	34.866 D	0.226 C	28.015	1457.1
417.8	424.90	34.867 D	0.226 C	28.016	1457.1
418.8	426.00	34.867 D	0.227 C	28.015	1457.1
419.8	427.10	34.867 D	0.226 C	28.016	1457.1
420.8	427.90	34.867 D	0.227 C	28.015	1457.2
421.8	429.05	34.867 D	0.223 C	28.015	1457.2
422.8	430.10	34.868 D	0.223 C	28.016	1457.2
423.8	431.10	34.868 D	0.223 C	28.016	1457.2
424.8	432.10	34.869 D	0.227 C	28.017	1457.2
425.8	433.15	34.869 D	0.228 C	28.017	1457.3
426.8	434.15	34.871 D	0.227 C	28.018	1457.3
427.8	435.10	34.868 D	0.228 C	28.016	1457.3
428.8	436.10	34.868 D	0.223 C	28.016	1457.3
429.8	437.20	34.869 D	0.228 C	28.017	1457.3
430.8	438.25	34.870 D	0.228 C	28.018	1457.3
431.8	439.10	34.869 D	0.223 C	28.017	1457.4
432.8	440.30	34.871 D	0.227 C	28.019	1457.4
433.8	441.40	34.868 D	0.229 C	28.016	1457.4
434.8	442.20	34.870 D	0.228 C	28.018	1457.4
435.8	443.20	34.870 D	0.228 C	28.018	1457.4
436.8	444.40	34.870 D	0.227 C	28.018	1457.4
437.8	445.50	34.870 D	0.227 C	28.017	1457.5
438.8	446.40	34.869 D	0.228 C	28.017	1457.5
439.8	447.45	34.870 D	0.228 C	28.018	1457.5
440.8	448.55	34.868 D	0.229 C	28.016	1457.5
441.8	449.50	34.870 D	0.223 C	28.018	1457.5
442.8	450.40	34.871 D	0.228 C	28.019	1457.5
443.8	451.45	34.872 D	0.228 C	28.019	1457.6
444.8	452.60	34.870 D	0.229 C	28.018	1457.6
445.8	453.55	34.871 D	0.228 C	28.018	1457.6
446.8	454.65	34.871 D	0.229 C	28.018	1457.6
447.8	455.45	34.872 D	0.229 C	28.019	1457.6
448.8	456.60	34.871 D	0.229 C	28.018	1457.6
449.8	457.55	34.872 D	0.229 C	28.019	1457.7
450.8	458.60	34.871 D	0.229 C	28.019	1457.7
451.8	459.80	34.872 D	0.229 C	28.019	1457.7
452.8	460.70	34.870 D	0.230 C	28.018	1457.7
453.8	461.60	34.874 D	0.229 C	28.021	1457.7
454.8	462.60	34.873 D	0.229 C	28.020	1457.7
455.8	463.70	34.871 D	0.230 C	28.019	1457.8
456.8	464.75	34.871 D	0.230 C	28.018	1457.8
457.8	465.70	34.874 D	0.228 C	28.021	1457.8
458.8	466.85	34.873 D	0.229 C	28.020	1457.8
459.8	467.80	34.874 D	0.229 C	28.021	1457.8
460.8	468.85	34.875 D	0.228 C	28.022	1457.8
461.8	469.70	34.872 D	0.230 C	28.019	1457.9
462.8	470.75	34.874 D	0.229 C	28.021	1457.9
463.8	471.90	34.874 D	0.230 C	28.020	1457.9
464.8	472.90	34.877 D	0.228 C	28.023	1457.9
465.8	474.05	34.875 D	0.229 C	28.022	1457.9
466.8	474.90	34.873 D	0.230 C	28.020	1458.0
467.8	475.85	34.876 D	0.223 C	28.023	1458.0
468.8	476.90	34.876 D	0.223 C	28.022	1458.0
469.8	478.00	34.874 D	0.229 C	28.021	1458.0
470.8	479.05	34.872 D	0.230 C	28.019	1458.0
471.8	480.10	34.873 D	0.230 C	28.020	1458.0
472.8	481.10	34.875 D	0.229 C	28.022	1458.1
473.8	482.15	34.876 D	0.229 C	28.022	1458.1
474.8	483.10	34.875 D	0.229 C	28.022	1458.1
475.8	484.05	34.875 D	0.229 C	28.021	1458.1
476.8	485.00	34.876 D	0.229 C	28.022	1458.1
477.8	486.10	34.878 D	0.223 C	28.024	1458.1

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
478.8	487.15	34.876 D	0.229 C	28.022	1458.2
479.8	488.15	34.875 D	0.229 C	28.022	1458.2
480.8	489.20	34.876 D	0.229 C	28.022	1458.2
481.8	490.25	34.877 D	0.229 C	28.023	1458.2
482.8	491.35	34.877 D	0.228 C	28.024	1458.2
483.8	492.30	34.877 D	0.229 C	28.023	1458.2
484.8	493.35	34.875 D	0.230 C	28.022	1458.3
485.8	494.40	34.877 D	0.229 C	28.023	1458.3
486.8	495.40	34.877 D	0.229 C	28.023	1458.3
487.8	496.35	34.877 D	0.229 C	28.024	1458.3
488.8	497.45	34.875 D	0.231 C	28.021	1458.3
489.8	498.25	34.878 D	0.229 C	28.024	1458.3
490.8	499.40	34.875 D	0.230 C	28.021	1458.4
491.8	500.45	34.879 D	0.228 C	28.025	1458.4
492.8	501.50	34.877 D	0.229 C	28.023	1458.4
493.8	502.50	34.878 D	0.229 C	28.024	1458.4
494.8	503.45	34.875 D	0.230 C	28.022	1458.4
495.8	504.35	34.878 D	0.229 C	28.024	1458.4
496.8	505.45	34.878 D	0.229 C	28.024	1458.5
497.8	506.65	34.877 D	0.229 C	28.023	1458.5
498.8	507.45	34.875 D	0.229 C	28.022	1458.5
499.8	508.65	34.879 D	0.228 C	28.025	1458.5





EXPERIMENT 2032

186

TEMPERATURE, C

-2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00

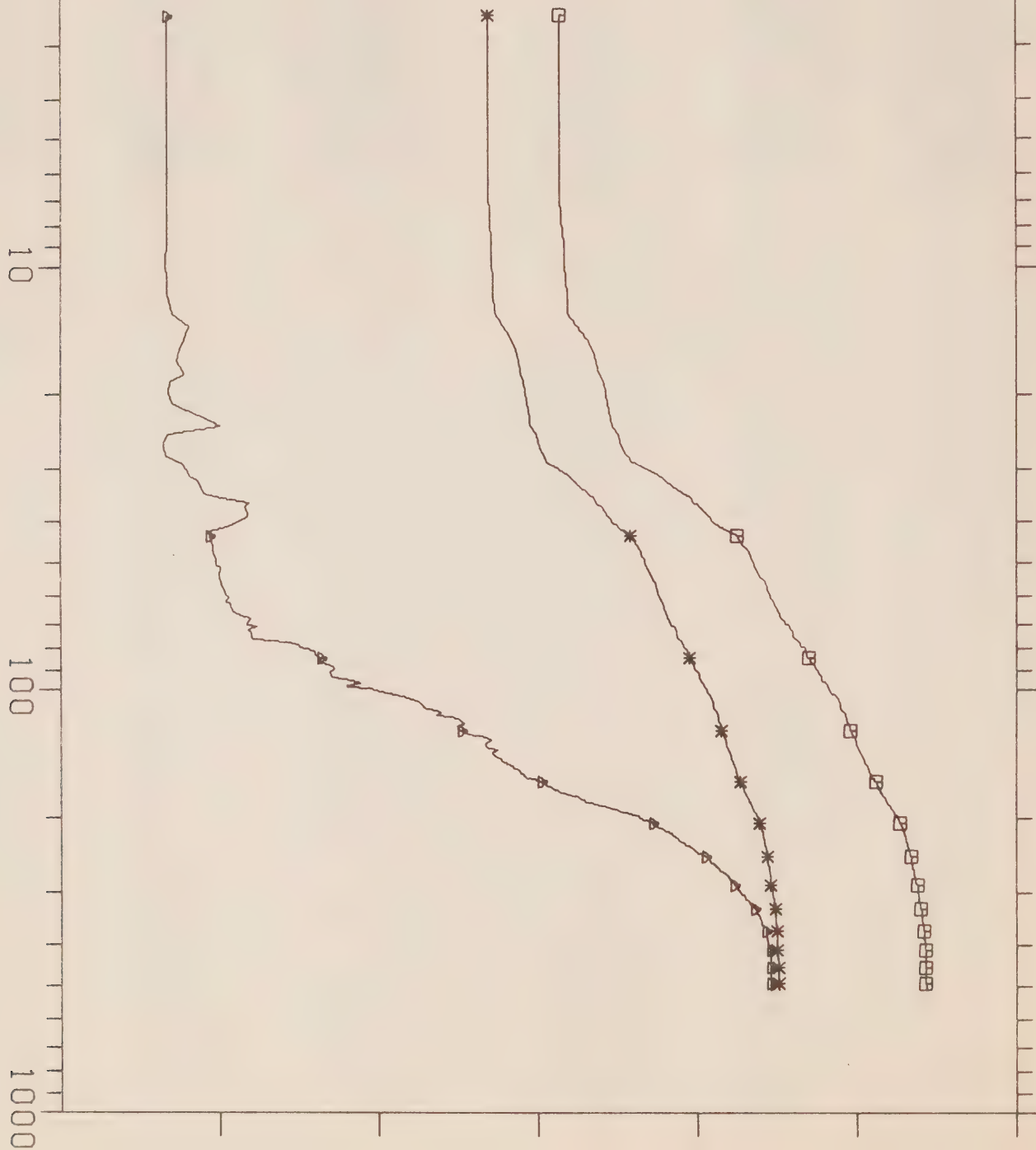
SALINITY 0/00

24.00 26.00 28.00 30.00 32.00 34.00 36.00

SIGMAT

19.00 21.00 23.00 25.00 27.00 29.00 31.00

DEPTH M



CRUISE 15-76-015

EUREKA SOUND-76

EXPER NO. 2032

LAT N.80-00-20

LONG W.86-49-00

WATER DEPTH 534

DEPTH INCR.

DATE 300376

LOCAL TIME 1423

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
2.8	2.55	30.277 E	-1.666 D	24.373	1434.9
3.8	3.65	30.276 E	-1.664 D	24.372	1435.0
4.8	4.45	30.276 E	-1.664 D	24.372	1435.0
5.8	5.65	30.275 E	-1.663 D	24.371	1435.0
6.8	6.65	30.282 E	-1.663 D	24.377	1435.0
7.8	7.75	30.309 E	-1.664 D	24.399	1435.1
8.8	8.80	30.331 E	-1.666 D	24.417	1435.1
9.8	9.75	30.339 E	-1.668 D	24.423	1435.1
10.8	10.75	30.354 E	-1.666 D	24.435	1435.2
11.8	11.60	30.371 E	-1.666 D	24.449	1435.2
12.8	12.85	30.382 E	-1.650 D	24.457	1435.3
13.8	13.75	30.503 E	-1.596 D	24.555	1435.3
14.8	14.85	30.624 E	-1.612 D	24.653	1435.9
15.8	15.70	30.697 E	-1.626 D	24.712	1435.9
16.8	16.75	30.744 E	-1.636 D	24.750	1436.0
17.8	17.85	30.785 E	-1.610 D	24.784	1436.2
18.8	18.75	30.833 E	-1.654 D	24.823	1436.1
19.8	19.90	30.861 E	-1.659 D	24.846	1436.1
20.8	20.85	30.881 E	-1.650 D	24.862	1436.2
21.8	21.80	30.907 E	-1.600 D	24.882	1436.5
22.8	22.85	30.920 E	-1.539 D	24.391	1436.8
23.8	23.75	30.940 E	-1.494 D	24.907	1437.0
24.8	24.90	31.018 E	-1.659 D	24.973	1436.4
25.8	25.85	31.048 E	-1.676 D	24.998	1436.4
26.8	26.80	31.077 E	-1.676 D	25.021	1436.4
27.8	27.85	31.117 E	-1.663 D	25.053	1436.5
28.8	29.00	31.197 E	-1.621 D	25.117	1436.9
29.8	29.90	31.370 E	-1.604 D	25.258	1437.2
30.8	31.00	31.513 E	-1.594 D	25.373	1437.5
31.8	31.85	31.598 E	-1.569 D	25.441	1437.7
32.8	33.05	31.702 E	-1.558 D	25.525	1438.0
33.8	34.05	31.830 E	-1.543 D	25.628	1438.2
34.8	35.05	31.918 E	-1.490 D	25.699	1438.6
35.8	35.95	31.958 E	-1.407 D	25.730	1439.1
36.8	37.10	32.034 E	-1.422 D	25.791	1439.1
37.8	37.95	32.099 E	-1.412 D	25.844	1439.3
38.8	39.00	32.155 E	-1.408 D	25.889	1439.4
39.8	40.25	32.223 E	-1.457 D	25.945	1439.3
40.8	41.15	32.285 E	-1.474 D	25.995	1439.3
41.8	42.15	32.390 E	-1.535 D	26.082	1439.2
42.8	43.10	32.490 E	-1.529 D	26.153	1439.4
43.8	44.10	32.536 E	-1.525 D	26.200	1439.5
44.8	45.30	32.574 E	-1.520 D	26.231	1439.6
45.8	46.30	32.617 E	-1.518 D	26.266	1439.7
46.8	47.20	32.650 E	-1.519 D	26.292	1439.7
47.8	48.25	32.672 E	-1.515 D	26.310	1439.8
48.8	49.15	32.706 E	-1.510 D	26.337	1439.9
49.8	50.25	32.721 E	-1.503 D	26.349	1439.9
50.8	51.40	32.742 E	-1.497 D	26.356	1440.0
51.8	52.25	32.762 E	-1.496 D	26.383	1440.1
52.8	53.30	32.790 E	-1.501 D	26.405	1440.1
53.8	54.20	32.809 E	-1.499 D	26.421	1440.1
54.8	55.45	32.855 E	-1.494 D	26.457	1440.3
55.8	56.35	32.872 E	-1.496 D	26.472	1440.3
56.8	57.45	32.888 E	-1.492 D	26.485	1440.3
57.8	58.35	32.908 E	-1.484 D	26.501	1440.4
58.8	59.45	32.916 E	-1.479 D	26.507	1440.5
59.8	60.45	32.926 E	-1.472 D	26.515	1440.5
60.8	61.45	32.951 E	-1.479 D	26.536	1440.5
61.8	62.55	32.976 E	-1.466 D	26.555	1440.7
62.8	63.50	33.000 E	-1.464 D	26.575	1440.7
63.8	64.55	33.017 E	-1.460 D	26.588	1440.8

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
64.8	65.65	33.041 E	-1.439 D	26.607	1440.9
65.8	66.60	33.046 E	-1.435 D	26.611	1441.0
66.8	67.50	33.066 E	-1.399 D	26.627	1441.2
67.8	68.40	33.081 E	-1.406 D	26.639	1441.2
68.8	69.70	33.116 E	-1.416 D	26.668	1441.2
69.8	70.70	33.151 E	-1.381 D	26.695	1441.5
70.8	71.65	33.189 E	-1.408 D	26.726	1441.4
71.8	72.55	33.202 E	-1.404 D	26.737	1441.4
72.8	73.50	33.204 E	-1.400 D	26.738	1441.5
73.8	74.70	33.207 E	-1.399 D	26.740	1441.5
74.8	75.65	33.235 E	-1.392 D	26.763	1441.6
75.8	76.55	33.255 E	-1.330 D	26.777	1441.9
76.8	77.70	33.291 E	-1.254 D	26.804	1442.4
77.8	78.85	33.319 E	-1.252 D	26.827	1442.4
78.8	79.75	33.351 E	-1.226 D	26.852	1442.6
79.8	80.65	33.366 E	-1.206 D	26.864	1442.7
80.8	81.90	33.380 E	-1.199 D	26.875	1442.8
81.8	82.90	33.389 E	-1.189 D	26.882	1442.9
82.8	83.65	33.407 E	-1.181 D	26.897	1443.0
83.8	84.80	33.429 E	-1.192 D	26.915	1443.0
84.8	85.95	33.447 E	-1.174 D	26.928	1443.1
85.8	86.90	33.460 E	-1.157 D	26.938	1443.2
86.8	87.95	33.477 E	-1.143 D	26.952	1443.3
87.8	88.95	33.495 E	-1.140 D	26.966	1443.4
88.8	89.90	33.512 E	-1.148 D	26.981	1443.4
89.8	90.95	33.529 E	-1.156 D	26.995	1443.4
90.8	92.05	33.551 E	-1.152 D	27.012	1443.4
91.8	92.95	33.559 E	-1.139 D	27.018	1443.5
92.8	93.85	33.569 E	-1.111 D	27.025	1443.7
93.8	95.10	33.583 E	-1.063 D	27.035	1444.0
94.8	96.10	33.623 E	-1.057 D	27.067	1444.1
95.8	96.90	33.642 E	-1.101 D	27.084	1443.9
96.8	98.10	33.646 E	-1.100 D	27.087	1443.9
97.8	99.05	33.659 E	-1.023 D	27.095	1444.3
98.8	100.15	33.683 D	-0.994 C	27.114	1444.5
99.8	101.25	33.689 D	-0.972 C	27.117	1444.6
100.8	102.00	33.708 D	-0.947 C	27.133	1444.8
101.8	103.00	33.733 D	-0.925 C	27.152	1444.9
102.8	104.15	33.753 D	-0.912 C	27.167	1445.0
103.8	105.20	33.771 D	-0.895 C	27.181	1445.2
104.8	106.05	33.780 D	-0.876 C	27.188	1445.3
105.8	107.20	33.791 D	-0.868 C	27.196	1445.4
106.8	108.30	33.798 D	-0.861 C	27.202	1445.4
107.8	109.20	33.800 D	-0.859 C	27.203	1445.4
108.8	110.35	33.801 D	-0.844 C	27.204	1445.5
109.8	111.20	33.822 D	-0.819 C	27.220	1445.7
110.8	112.25	33.837 D	-0.805 C	27.231	1445.8
111.8	113.20	33.854 D	-0.809 C	27.245	1445.8
112.8	114.45	33.860 D	-0.819 C	27.250	1445.8
113.8	115.40	33.864 D	-0.775 C	27.252	1446.0
114.8	116.30	33.872 D	-0.749 C	27.258	1446.2
115.8	117.25	33.878 D	-0.746 C	27.262	1446.2
116.8	118.40	33.885 D	-0.741 C	27.268	1446.3
117.8	119.45	33.895 D	-0.730 C	27.276	1446.3
118.8	120.50	33.901 D	-0.729 C	27.280	1446.4
119.8	121.40	33.912 D	-0.754 C	27.290	1446.3
120.8	122.55	33.916 D	-0.745 C	27.293	1446.4
121.8	123.50	33.922 D	-0.748 C	27.298	1446.4
122.8	124.45	33.930 D	-0.739 C	27.304	1446.4
123.8	125.55	33.939 D	-0.732 C	27.311	1446.5
124.8	126.55	33.946 D	-0.717 C	27.316	1446.6
125.8	127.65	33.953 D	-0.700 C	27.321	1446.7
126.8	128.60	33.962 D	-0.683 C	27.328	1446.8
127.8	129.65	33.973 D	-0.661 C	27.336	1446.9
128.8	130.55	33.984 D	-0.649 C	27.344	1447.0
129.8	131.70	33.995 D	-0.646 C	27.353	1447.1
130.8	132.50	34.005 D	-0.660 C	27.352	1447.0
131.8	133.60	34.007 D	-0.665 C	27.363	1447.0
132.8	134.80	34.007 D	-0.664 C	27.363	1447.1



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
133.8	135.75	34.015 D	-0.659 C	27.370	1447.1
134.8	136.75	34.017 D	-0.655 C	27.371	1447.1
135.8	137.80	34.028 D	-0.646 C	27.380	1447.2
136.8	138.85	34.039 D	-0.623 C	27.388	1447.4
137.8	139.85	34.048 D	-0.639 C	27.396	1447.3
138.8	140.65	34.059 D	-0.645 C	27.404	1447.3
139.8	141.95	34.067 D	-0.639 C	27.411	1447.4
140.8	142.90	34.072 D	-0.632 C	27.414	1447.4
141.8	143.95	34.077 D	-0.626 C	27.419	1447.5
142.8	144.95	34.088 D	-0.619 C	27.427	1447.5
143.8	146.00	34.091 D	-0.615 C	27.430	1447.6
144.8	146.90	34.099 D	-0.613 C	27.435	1447.6
145.8	147.95	34.106 D	-0.602 C	27.441	1447.7
146.8	149.00	34.114 D	-0.598 C	27.447	1447.7
147.8	149.90	34.122 D	-0.592 C	27.454	1447.8
148.8	151.05	34.134 D	-0.582 C	27.462	1447.9
149.8	151.95	34.137 D	-0.578 C	27.465	1447.9
150.8	153.10	34.145 D	-0.575 C	27.471	1448.0
151.8	154.00	34.151 D	-0.563 C	27.476	1448.0
152.8	155.10	34.157 D	-0.560 C	27.480	1448.1
153.8	156.10	34.166 D	-0.556 C	27.488	1448.1
154.8	157.05	34.171 D	-0.553 C	27.492	1448.2
155.8	158.15	34.175 D	-0.544 C	27.494	1448.2
156.8	159.10	34.184 D	-0.544 C	27.502	1448.3
157.8	160.15	34.190 D	-0.539 C	27.506	1448.3
158.8	161.05	34.194 D	-0.528 C	27.509	1448.4
159.8	162.25	34.211 D	-0.513 C	27.522	1448.5
160.8	163.25	34.224 D	-0.502 C	27.532	1448.6
161.8	164.15	34.228 D	-0.497 C	27.535	1448.6
162.8	165.10	34.238 D	-0.488 C	27.543	1448.7
163.8	166.35	34.248 D	-0.479 C	27.551	1448.8
164.8	167.40	34.261 D	-0.473 C	27.551	1448.8
165.8	168.30	34.269 D	-0.469 C	27.567	1448.9
166.8	169.20	34.273 D	-0.461 C	27.570	1448.9
167.8	170.30	34.279 D	-0.453 C	27.574	1449.0
168.8	171.30	34.288 D	-0.445 C	27.581	1449.1
169.8	172.20	34.293 D	-0.441 C	27.585	1449.1
170.8	173.55	34.298 D	-0.436 C	27.589	1449.2
171.8	174.35	34.303 D	-0.429 C	27.592	1449.2
172.8	175.35	34.312 D	-0.419 C	27.600	1449.3
173.8	176.45	34.324 D	-0.407 C	27.609	1449.4
174.8	177.35	34.333 D	-0.391 C	27.615	1449.5
175.8	178.50	34.345 D	-0.377 C	27.625	1449.6
176.8	179.50	34.351 D	-0.370 C	27.629	1449.6
177.8	180.65	34.363 D	-0.358 C	27.638	1449.7
178.8	181.40	34.367 D	-0.357 C	27.641	1449.7
179.8	182.60	34.370 D	-0.354 C	27.644	1449.8
180.8	183.45	34.375 D	-0.347 C	27.647	1449.8
181.8	184.70	34.379 D	-0.339 C	27.650	1449.9
182.8	185.50	34.396 D	-0.316 C	27.663	1450.0
183.8	186.70	34.413 D	-0.304 C	27.676	1450.1
184.8	187.60	34.423 D	-0.290 C	27.683	1450.2
185.8	188.65	34.430 D	-0.279 C	27.688	1450.3
186.8	189.80	34.438 D	-0.266 C	27.694	1450.4
187.8	190.75	34.447 D	-0.257 C	27.701	1450.5
188.8	191.80	34.452 D	-0.249 C	27.704	1450.5
189.8	192.65	34.457 D	-0.248 C	27.709	1450.6
190.8	193.80	34.468 D	-0.230 C	27.716	1450.7
191.8	194.70	34.474 D	-0.222 C	27.721	1450.7
192.8	195.75	34.486 D	-0.209 C	27.730	1450.8
193.8	196.80	34.490 D	-0.203 C	27.733	1450.9
194.8	197.75	34.504 D	-0.187 C	27.744	1451.0
195.8	198.90	34.517 D	-0.183 C	27.755	1451.0
196.8	199.85	34.517 D	-0.179 C	27.754	1451.1
197.8	200.90	34.523 D	-0.176 C	27.758	1451.1
198.8	202.00	34.528 D	-0.169 C	27.763	1451.2
199.8	202.85	34.538 D	-0.156 C	27.769	1451.3
200.8	204.00	34.545 D	-0.149 C	27.775	1451.3
201.8	205.00	34.548 D	-0.144 C	27.778	1451.4

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
202.8	206.15	34.550 D	-0.142 C	27.779	1451.4
203.8	206.85	34.555 D	-0.139 C	27.782	1451.4
204.8	208.00	34.557 D	-0.135 C	27.784	1451.5
205.8	209.15	34.563 D	-0.130 C	27.789	1451.5
206.8	210.20	34.566 D	-0.123 C	27.791	1451.6
207.8	211.15	34.571 D	-0.115 C	27.794	1451.6
208.8	212.15	34.574 D	-0.111 C	27.797	1451.7
209.8	213.20	34.580 D	-0.104 C	27.801	1451.7
210.8	214.30	34.587 D	-0.102 C	27.807	1451.8
211.8	215.25	34.594 D	-0.091 C	27.812	1451.8
212.8	216.05	34.594 D	-0.088 C	27.812	1451.9
213.8	217.20	34.598 D	-0.082 C	27.815	1451.9
214.8	218.25	34.602 D	-0.078 C	27.817	1452.0
215.8	219.30	34.605 D	-0.078 C	27.820	1452.0
216.8	220.20	34.604 D	-0.075 C	27.819	1452.0
217.8	221.40	34.611 D	-0.069 C	27.825	1452.1
218.8	222.25	34.611 D	-0.068 C	27.824	1452.1
219.8	223.35	34.613 D	-0.063 C	27.826	1452.1
220.8	224.35	34.617 D	-0.058 C	27.829	1452.2
221.8	225.45	34.622 D	-0.058 C	27.833	1452.2
222.8	226.30	34.620 D	-0.055 C	27.831	1452.2
223.8	227.30	34.625 D	-0.053 C	27.835	1452.3
224.8	228.55	34.624 D	-0.049 C	27.834	1452.3
225.8	229.35	34.630 D	-0.042 C	27.839	1452.3
226.8	230.30	34.637 D	-0.038 C	27.843	1452.4
227.8	231.55	34.639 D	-0.033 C	27.845	1452.4
228.8	232.50	34.640 D	-0.026 C	27.846	1452.5
229.8	233.50	34.644 D	-0.025 C	27.849	1452.5
230.8	234.65	34.647 D	-0.019 C	27.851	1452.6
231.8	235.65	34.651 D	-0.017 C	27.854	1452.6
232.8	236.60	34.656 D	-0.014 C	27.858	1452.6
233.8	237.65	34.657 D	-0.012 C	27.859	1452.7
234.8	238.50	34.655 D	-0.006 C	27.857	1452.7
235.8	239.50	34.660 D	-0.008 C	27.861	1452.7
236.8	240.55	34.667 D	-0.002 C	27.866	1452.8
237.8	241.70	34.671 D	0.002 C	27.870	1452.8
238.8	242.80	34.673 D	0.005 C	27.871	1452.8
239.8	243.70	34.668 D	0.014 C	27.866	1452.9
240.8	244.60	34.670 D	0.016 C	27.867	1452.9
241.8	245.80	34.674 D	0.018 C	27.871	1452.9
242.8	246.85	34.677 D	0.025 C	27.873	1453.0
243.8	247.75	34.680 D	0.030 C	27.875	1453.0
244.8	248.70	34.680 D	0.032 C	27.875	1453.1
245.8	249.95	34.681 D	0.033 C	27.876	1453.1
246.8	250.75	34.682 D	0.033 C	27.877	1453.1
247.8	251.90	34.685 D	0.034 C	27.879	1453.1
248.8	252.80	34.684 D	0.038 C	27.878	1453.2
249.8	253.95	34.686 D	0.039 C	27.880	1453.2
250.8	254.75	34.690 D	0.042 C	27.882	1453.2
251.8	256.00	34.692 D	0.049 C	27.884	1453.3
252.8	256.85	34.697 D	0.050 C	27.887	1453.3
253.8	257.95	34.699 D	0.055 C	27.839	1453.4
254.8	259.00	34.700 D	0.057 C	27.890	1453.4
255.8	260.05	34.704 D	0.058 C	27.893	1453.4
256.8	261.00	34.703 D	0.060 C	27.892	1453.4
257.8	262.10	34.704 D	0.061 C	27.893	1453.5
258.8	262.95	34.704 D	0.065 C	27.893	1453.5
259.8	264.15	34.710 D	0.067 C	27.897	1453.5
260.8	264.95	34.714 D	0.072 C	27.900	1453.6
261.8	266.15	34.716 D	0.072 C	27.902	1453.6
262.8	267.00	34.715 D	0.077 C	27.901	1453.6
263.8	268.15	34.718 D	0.080 C	27.903	1453.7
264.8	269.05	34.721 D	0.081 C	27.906	1453.7
265.8	270.15	34.722 D	0.085 C	27.906	1453.7
266.8	271.10	34.724 D	0.086 C	27.908	1453.7
267.8	272.20	34.727 D	0.089 C	27.910	1453.8
268.8	273.25	34.729 D	0.091 C	27.911	1453.8
269.8	274.15	34.730 D	0.096 C	27.912	1453.8
270.8	275.40	34.735 D	0.097 C	27.916	1453.9



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
271.8	276.30	34.736 D	0.099 C	27.917	1453.9
272.8	277.45	34.737 D	0.100 C	27.918	1453.9
273.8	278.40	34.740 D	0.100 C	27.919	1454.0
274.8	279.45	34.740 D	0.102 C	27.919	1454.0
275.8	280.45	34.741 D	0.104 C	27.920	1454.0
276.8	281.45	34.744 D	0.106 C	27.923	1454.0
277.8	282.50	34.743 D	0.110 C	27.922	1454.1
278.8	283.40	34.747 D	0.110 C	27.925	1454.1
279.8	284.55	34.748 D	0.112 C	27.926	1454.1
280.8	285.35	34.749 D	0.114 C	27.927	1454.1
281.8	286.50	34.751 D	0.115 C	27.927	1454.2
282.8	287.40	34.752 D	0.116 C	27.928	1454.2
283.8	288.45	34.756 D	0.118 C	27.932	1454.2
284.8	289.50	34.756 D	0.120 C	27.932	1454.2
285.8	290.45	34.756 D	0.122 C	27.931	1454.3
286.8	291.65	34.757 D	0.123 C	27.932	1454.3
287.8	292.55	34.757 D	0.126 C	27.932	1454.3
288.8	293.70	34.759 D	0.126 C	27.934	1454.3
289.8	294.70	34.760 D	0.126 C	27.935	1454.4
290.8	295.80	34.763 D	0.127 C	27.937	1454.4
291.8	296.65	34.766 D	0.129 C	27.939	1454.4
292.8	297.70	34.766 D	0.131 C	27.939	1454.4
293.8	298.65	34.767 D	0.131 C	27.939	1454.5
294.8	299.65	34.767 D	0.134 C	27.940	1454.5
295.8	300.75	34.769 D	0.135 C	27.941	1454.5
296.8	301.60	34.772 D	0.137 C	27.944	1454.5
297.8	302.85	34.772 D	0.140 C	27.944	1454.6
298.8	303.70	34.774 D	0.143 C	27.945	1454.6
299.8	304.85	34.775 D	0.145 C	27.946	1454.6
300.8	305.90	34.776 D	0.146 C	27.947	1454.7
301.8	306.85	34.776 D	0.148 C	27.947	1454.7
302.8	307.95	34.780 D	0.149 C	27.950	1454.7
303.8	308.85	34.782 D	0.151 C	27.951	1454.7
304.8	309.80	34.783 D	0.151 C	27.951	1454.8
305.8	310.95	34.784 D	0.152 C	27.952	1454.8
306.8	312.00	34.783 D	0.155 C	27.951	1454.8
307.8	313.05	34.786 D	0.155 C	27.954	1454.8
308.8	314.05	34.788 D	0.158 C	27.955	1454.9
309.8	315.10	34.790 D	0.162 C	27.957	1454.9
310.8	316.05	34.795 D	0.162 C	27.961	1454.9
311.8	317.00	34.795 D	0.165 C	27.961	1455.0
312.8	318.10	34.795 D	0.166 C	27.961	1455.0
313.8	319.10	34.798 D	0.165 C	27.963	1455.0
314.8	320.10	34.800 D	0.169 C	27.965	1455.0
315.8	321.05	34.799 D	0.173 C	27.964	1455.1
316.8	322.10	34.800 D	0.173 C	27.964	1455.1
317.8	323.15	34.804 D	0.173 C	27.967	1455.1
318.8	324.15	34.804 D	0.177 C	27.968	1455.1
319.8	325.25	34.807 D	0.179 C	27.970	1455.2
320.8	326.35	34.807 D	0.180 C	27.969	1455.2
321.8	327.35	34.809 D	0.181 C	27.971	1455.2
322.8	328.35	34.809 D	0.182 C	27.971	1455.2
323.8	329.15	34.811 D	0.184 C	27.972	1455.3
324.8	330.40	34.810 D	0.184 C	27.972	1455.3
325.8	331.25	34.811 D	0.184 C	27.972	1455.3
326.8	332.30	34.812 D	0.184 C	27.973	1455.3
327.8	333.40	34.811 D	0.184 C	27.973	1455.3
328.8	334.40	34.811 D	0.186 C	27.972	1455.4
329.8	335.45	34.813 D	0.187 C	27.974	1455.4
330.8	336.30	34.814 D	0.190 C	27.974	1455.4
331.8	337.40	34.817 D	0.190 C	27.977	1455.4
332.8	338.45	34.818 D	0.191 C	27.978	1455.5
333.8	339.50	34.820 D	0.192 C	27.979	1455.5
334.8	340.40	34.821 D	0.193 C	27.980	1455.5
335.8	341.40	34.822 D	0.194 C	27.981	1455.5
336.8	342.55	34.819 D	0.196 C	27.978	1455.6
337.8	343.45	34.823 D	0.196 C	27.981	1455.6
338.8	344.60	34.825 D	0.196 C	27.983	1455.6
339.8	345.60	34.824 D	0.199 C	27.982	1455.6



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
340.8	346.60	34.827 D	0.197 C	27.985	1455.6
341.8	347.75	34.825 D	0.199 C	27.983	1455.7
342.8	348.50	34.827 D	0.200 C	27.984	1455.7
343.8	349.55	34.828 D	0.201 C	27.985	1455.7
344.8	350.55	34.826 D	0.203 C	27.984	1455.7
345.8	351.75	34.829 D	0.202 C	27.986	1455.7
346.8	352.70	34.828 D	0.203 C	27.985	1455.8
347.8	353.70	34.831 D	0.201 C	27.988	1455.8
348.8	354.65	34.831 D	0.202 C	27.987	1455.8
349.8	355.75	34.829 D	0.204 C	27.986	1455.8
350.8	356.80	34.834 D	0.202 C	27.990	1455.8
351.8	357.75	34.833 D	0.206 C	27.989	1455.9
352.8	358.85	34.832 D	0.207 C	27.989	1455.9
353.8	359.85	34.834 D	0.208 C	27.989	1455.9
354.8	360.80	34.834 D	0.211 C	27.989	1455.9
355.8	361.90	34.835 D	0.214 C	27.991	1456.0
356.8	362.95	34.835 D	0.216 C	27.990	1456.0
357.8	363.80	34.837 D	0.219 C	27.992	1456.0
358.8	364.80	34.839 D	0.219 C	27.994	1456.1
359.8	365.85	34.840 D	0.218 C	27.994	1456.1
360.8	366.85	34.840 D	0.217 C	27.994	1456.1
361.8	368.05	34.840 D	0.217 C	27.994	1456.1
362.8	369.15	34.842 D	0.216 C	27.995	1456.1
363.8	370.15	34.841 D	0.216 C	27.995	1456.1
364.8	371.10	34.842 D	0.215 C	27.996	1456.1
365.8	372.20	34.842 D	0.215 C	27.996	1456.2
366.8	373.20	34.843 D	0.215 C	27.997	1456.2
367.8	374.10	34.842 D	0.216 C	27.995	1456.2
368.8	375.10	34.842 D	0.216 C	27.996	1456.2
369.8	376.15	34.842 D	0.216 C	27.996	1456.2
370.8	377.25	34.843 D	0.216 C	27.996	1456.2
371.8	378.20	34.844 D	0.217 C	27.997	1456.3
372.8	379.05	34.845 D	0.217 C	27.998	1456.3
373.8	380.10	34.844 D	0.218 C	27.998	1456.3
374.8	381.30	34.844 D	0.219 C	27.997	1456.3
375.8	382.15	34.845 D	0.218 C	27.998	1456.3
376.8	383.15	34.847 D	0.217 C	27.999	1456.4
377.8	384.35	34.846 D	0.218 C	27.999	1456.4
378.8	385.30	34.848 D	0.217 C	28.001	1456.4
379.8	386.20	34.849 D	0.218 C	28.002	1456.4
380.8	387.25	34.849 D	0.219 C	28.001	1456.4
381.8	388.35	34.850 D	0.219 C	28.002	1456.5
382.8	389.50	34.850 D	0.219 C	28.002	1456.5
383.8	390.40	34.850 D	0.220 C	28.002	1456.5
384.8	391.55	34.851 D	0.221 C	28.003	1456.5
385.8	392.30	34.851 D	0.221 C	28.003	1456.5
386.8	393.45	34.852 D	0.221 C	28.003	1456.5
387.8	394.50	34.852 D	0.221 C	28.004	1456.6
388.8	395.60	34.852 D	0.221 C	28.003	1456.6
389.8	396.45	34.853 D	0.221 C	28.004	1456.6
390.8	397.70	34.852 D	0.221 C	28.004	1456.6
391.8	398.45	34.854 D	0.221 C	28.005	1456.6
392.8	399.55	34.854 D	0.222 C	28.005	1456.7
393.8	400.50	34.855 D	0.222 C	28.006	1456.7
394.8	401.65	34.856 D	0.222 C	28.006	1456.7
395.8	402.65	34.853 D	0.224 C	28.004	1456.7
396.8	403.60	34.856 D	0.223 C	28.007	1456.7
397.8	404.75	34.854 D	0.224 C	28.005	1456.7
398.8	405.75	34.855 D	0.224 C	28.006	1456.8
399.8	406.70	34.853 D	0.225 C	28.005	1456.8
400.8	407.65	34.855 D	0.226 C	28.005	1456.8
401.8	408.75	34.856 D	0.229 C	28.007	1456.8
402.8	409.70	34.857 D	0.230 C	28.007	1456.9
403.8	410.90	34.856 D	0.231 C	28.006	1456.9
404.8	411.80	34.855 D	0.232 C	28.006	1456.9
405.8	412.90	34.856 D	0.231 C	28.006	1456.9
406.8	413.70	34.858 D	0.229 C	28.008	1456.9
407.8	414.85	34.858 D	0.228 C	28.008	1456.9
408.8	415.75	34.858 D	0.228 C	28.008	1457.0

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
409.8	416.85	34.858 D	0.227 C	28.008	1457.0
410.8	417.90	34.858 D	0.229 C	28.008	1457.0
411.8	418.85	34.859 D	0.228 C	28.008	1457.0
412.8	420.10	34.859 D	0.228 C	28.009	1457.0
413.8	420.90	34.858 D	0.229 C	28.008	1457.0
414.8	421.90	34.859 D	0.229 C	28.008	1457.1
415.8	423.15	34.860 D	0.229 C	28.010	1457.1
416.8	423.95	34.859 D	0.229 C	28.009	1457.1
417.8	425.15	34.859 D	0.228 C	28.009	1457.1
418.8	426.10	34.860 D	0.228 C	28.010	1457.1
419.8	427.15	34.859 D	0.228 C	28.009	1457.1
420.8	428.00	34.860 D	0.228 C	28.010	1457.2
421.8	429.10	34.859 D	0.230 C	28.009	1457.2
422.8	430.15	34.861 D	0.229 C	28.010	1457.2
423.8	431.20	34.860 D	0.229 C	28.010	1457.2
424.8	432.20	34.860 D	0.229 C	28.009	1457.2
425.8	433.20	34.862 D	0.230 C	28.011	1457.3
426.8	434.10	34.860 D	0.231 C	28.010	1457.3
427.8	435.40	34.862 D	0.230 C	28.011	1457.3
428.8	436.35	34.864 D	0.229 C	28.013	1457.3
429.8	437.35	34.861 D	0.231 C	28.011	1457.3
430.8	438.25	34.861 D	0.231 C	28.010	1457.3
431.8	439.25	34.862 D	0.231 C	28.011	1457.4
432.8	440.35	34.861 D	0.231 C	28.010	1457.4
433.8	441.35	34.863 D	0.230 C	28.012	1457.4
434.8	442.30	34.864 D	0.230 C	28.013	1457.4
435.8	443.25	34.863 D	0.229 C	28.012	1457.4
436.8	444.40	34.863 D	0.230 C	28.012	1457.4
437.8	445.55	34.864 D	0.228 C	28.013	1457.5
438.8	446.50	34.864 D	0.229 C	28.013	1457.5
439.8	447.35	34.864 D	0.229 C	28.012	1457.5
440.8	448.35	34.864 D	0.229 C	28.013	1457.5
441.8	449.50	34.866 D	0.228 C	28.015	1457.5
442.8	450.55	34.866 D	0.229 C	28.014	1457.5
443.8	451.50	34.865 D	0.229 C	28.014	1457.6
444.8	452.45	34.865 D	0.229 C	28.013	1457.6
445.8	453.70	34.864 D	0.229 C	28.013	1457.6
446.8	454.70	34.866 D	0.228 C	28.015	1457.6
447.8	455.65	34.866 D	0.228 C	28.014	1457.6
448.8	456.50	34.865 D	0.229 C	28.014	1457.6
449.8	457.60	34.867 D	0.228 C	28.015	1457.7
450.8	458.70	34.865 D	0.229 C	28.014	1457.7
451.8	459.75	34.864 D	0.230 C	28.012	1457.7
452.8	460.65	34.866 D	0.229 C	28.014	1457.7
453.8	461.70	34.866 D	0.229 C	28.015	1457.7
454.8	462.80	34.866 D	0.229 C	28.014	1457.7
455.8	463.70	34.867 D	0.229 C	28.015	1457.8
456.8	464.70	34.867 D	0.228 C	28.015	1457.8
457.8	465.80	34.864 D	0.230 C	28.013	1457.8
458.8	466.95	34.866 D	0.229 C	28.015	1457.8
459.8	467.70	34.867 D	0.229 C	28.015	1457.8
460.8	468.80	34.865 D	0.230 C	28.014	1457.8
461.8	470.00	34.867 D	0.228 C	28.015	1457.9
462.8	470.90	34.868 D	0.228 C	28.016	1457.9
463.8	471.90	34.868 D	0.229 C	28.016	1457.9
464.8	472.85	34.867 D	0.229 C	28.015	1457.9
465.8	474.00	34.868 D	0.230 C	28.016	1457.9
466.8	475.05	34.867 D	0.229 C	28.015	1457.9
467.8	475.90	34.868 D	0.229 C	28.016	1458.0
468.8	476.95	34.866 D	0.230 C	28.015	1458.0
469.8	478.10	34.868 D	0.229 C	28.016	1458.0
470.8	479.00	34.868 D	0.230 C	28.016	1458.0
471.8	480.15	34.868 D	0.229 C	28.016	1458.0
472.8	481.15	34.869 D	0.229 C	28.017	1458.0
473.8	482.15	34.866 D	0.230 C	28.015	1458.1
474.8	483.15	34.867 D	0.230 C	28.015	1458.1
475.8	484.25	34.869 D	0.229 C	28.017	1458.1
476.8	485.20	34.869 D	0.230 C	28.017	1458.1
477.8	486.25	34.868 D	0.230 C	28.016	1458.1

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
478.8	487.35	34.867 D	0.230 C	28.016	1458.2
479.8	488.25	34.867 D	0.231 C	28.015	1458.2
480.8	489.10	34.868 D	0.230 C	28.016	1458.2
481.8	490.25	34.869 D	0.230 C	28.016	1458.2
482.8	491.35	34.869 D	0.229 C	28.017	1458.2
483.8	492.30	34.869 D	0.230 C	28.017	1458.2
484.8	493.20	34.867 D	0.231 C	28.015	1458.3
485.8	494.35	34.869 D	0.230 C	28.017	1458.3
486.8	495.40	34.868 D	0.230 C	28.016	1458.3
487.8	496.40	34.868 D	0.231 C	28.016	1458.3
488.8	497.35	34.869 D	0.230 C	28.017	1458.3
489.8	498.45	34.868 D	0.231 C	28.016	1458.3
490.8	499.40	34.871 D	0.229 C	28.019	1458.4
491.8	500.50	34.870 D	0.230 C	28.017	1458.4
492.8	501.35	34.871 D	0.230 C	28.018	1458.4
493.8	502.65	34.869 D	0.231 C	28.016	1458.4
494.8	503.40	34.871 D	0.230 C	28.018	1458.4
495.8	504.65	34.869 D	0.231 C	28.017	1458.4
496.8	505.50	34.870 D	0.230 C	28.017	1458.5
497.8	506.45	34.871 D	0.231 C	28.018	1458.5
498.8	507.60	34.871 D	0.230 C	28.019	1458.5
499.8	508.50	34.872 D	0.230 C	28.019	1458.5





TEMPERATURE, C

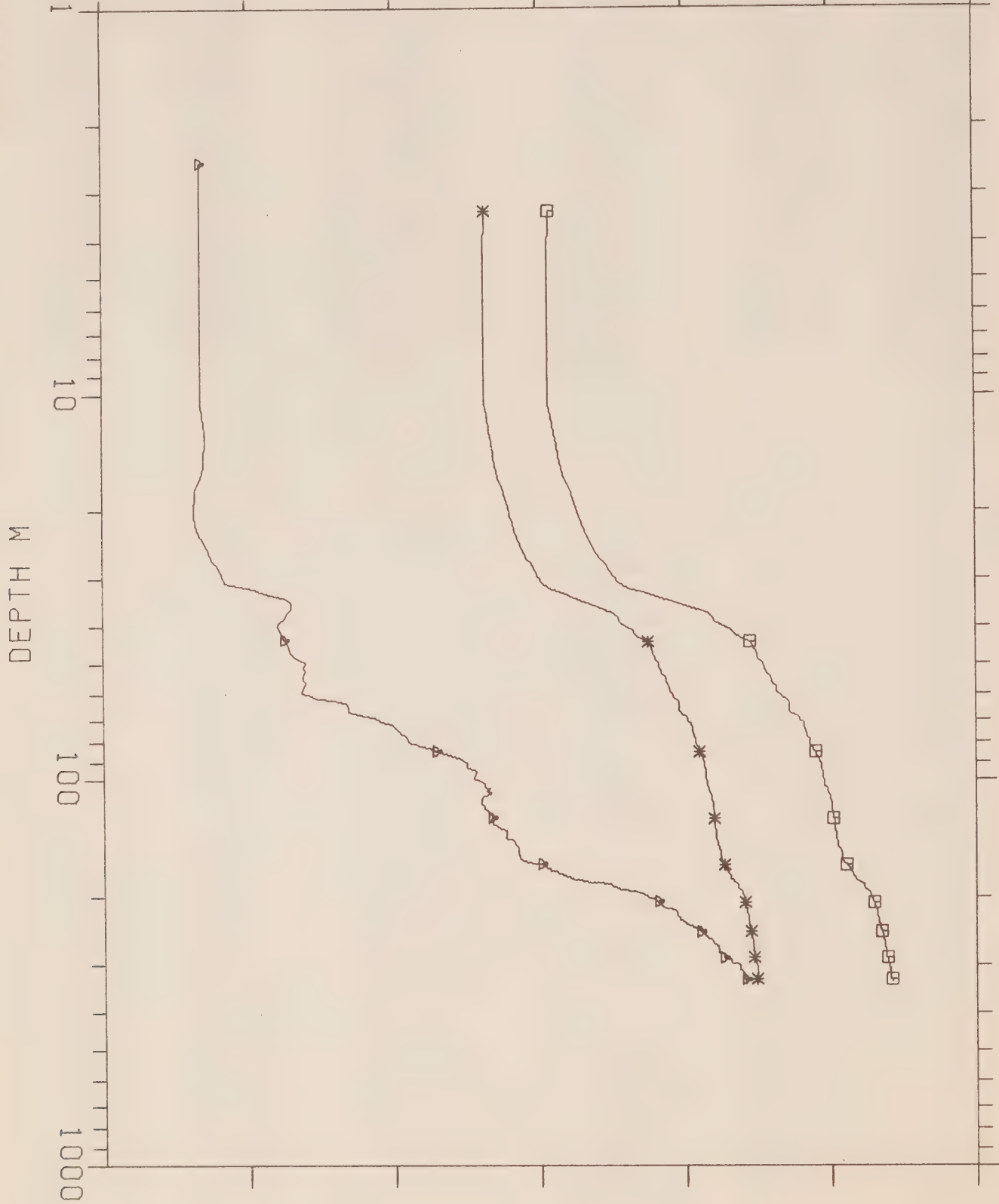
-2.00 -1.50 -1.00 -0.50 0.00 0.50 1.00

SALINITY 0/00

24.00 26.00 28.00 30.00 32.00 34.00 36.00

SIGMAT

19.00 21.00 23.00 25.00 27.00 29.00 31.00



CRUISE 15-76-015

EUREKA SOUND-76

EXPER NO. 2033

LAT N.80-00-00

LONG W.86-36-00

WATER DEPTH 354

DEPTH INCR.

DATE 310376

LOCAL TIME 0904

DEPTH	PRES	SAL	TEMP	SIGMAT	SOUND
2.8	2.50		-1.660 D		
3.8	3.35	30.152 E	-1.660 D	24.271	1434.3
4.8	4.50	30.144 E	-1.660 D	24.265	1434.3
5.8	5.45	30.142 E	-1.660 D	24.263	1434.3
6.8	6.40	30.142 E	-1.661 D	24.263	1434.3
7.8	7.60	30.142 E	-1.661 D	24.263	1434.3
8.8	8.55	30.140 E	-1.660 D	24.262	1434.9
9.8	9.60	30.140 E	-1.659 D	24.262	1434.9
10.8	10.55	30.150 E	-1.659 D	24.269	1434.9
11.8	11.45	30.177 E	-1.653 D	24.291	1435.0
12.8	12.55	30.215 E	-1.645 D	24.322	1435.1
13.8	13.40	30.264 E	-1.647 D	24.362	1435.2
14.8	14.55	30.289 E	-1.649 D	24.382	1435.2
15.8	15.45	30.314 E	-1.651 D	24.402	1435.3
16.8	16.60	30.351 E	-1.661 D	24.433	1435.3
17.8	17.60	30.437 E	-1.679 D	24.502	1435.4
18.8	18.70	30.473 E	-1.681 D	24.532	1435.4
19.8	19.75	30.526 E	-1.684 D	24.575	1435.5
20.8	20.70	30.569 E	-1.683 D	24.609	1435.6
21.8	21.70	30.603 E	-1.681 D	24.637	1435.6
22.8	22.60	30.634 E	-1.677 D	24.662	1435.7
23.8	23.60	30.672 E	-1.660 D	24.692	1435.9
24.8	24.70	30.730 E	-1.646 D	24.740	1436.0
25.8	25.60	30.789 E	-1.636 D	24.787	1436.2
26.8	26.75	30.854 E	-1.626 D	24.840	1436.3
27.8	27.65	30.924 E	-1.611 D	24.896	1436.5
28.8	28.80	30.987 E	-1.596 D	24.947	1436.7
29.8	29.80	31.037 E	-1.589 D	24.987	1436.8
30.8	30.70	31.100 E	-1.582 D	25.038	1437.0
31.8	31.90	31.224 E	-1.479 D	25.137	1437.6
32.8	32.65	31.441 E	-1.438 D	25.311	1438.2
33.8	33.90	31.680 E	-1.366 D	25.503	1438.9
34.8	34.85	31.883 E	-1.348 D	25.667	1439.2
35.8	35.85	32.121 E	-1.352 D	25.860	1439.6
36.8	36.85	32.318 E	-1.365 D	26.020	1439.8
37.8	37.90	32.387 E	-1.372 D	26.076	1439.9
38.8	38.90	32.428 E	-1.391 D	26.109	1439.9
39.8	39.95	32.513 E	-1.400 D	26.179	1440.0
40.8	40.90	32.632 E	-1.388 D	26.275	1440.2
41.8	42.05	32.697 E	-1.385 D	26.328	1440.3
42.8	43.00	32.782 E	-1.377 D	26.396	1440.5
43.8	43.85	32.905 E	-1.368 D	26.495	1440.7
44.8	45.00	32.939 E	-1.360 D	26.523	1440.8
45.8	45.95	32.962 E	-1.361 D	26.541	1440.9
46.8	47.10	32.993 E	-1.348 D	26.566	1441.0
47.8	48.15	33.008 E	-1.333 D	26.578	1441.1
48.8	49.10	33.036 E	-1.309 D	26.599	1441.3
49.8	50.15	33.074 E	-1.298 D	26.630	1441.4
50.8	51.10	33.092 E	-1.309 D	26.645	1441.4
51.8	52.20	33.116 E	-1.301 D	26.664	1441.5
52.8	53.15	33.136 E	-1.303 D	26.680	1441.5
53.8	54.20	33.188 E	-1.312 D	26.723	1441.6
54.8	55.10	33.199 E	-1.308 D	26.731	1441.6
55.8	56.10	33.207 E	-1.299 D	26.738	1441.7
56.8	57.20	33.251 E	-1.306 D	26.774	1441.7
57.8	58.20	33.255 E	-1.311 D	26.777	1441.7
58.8	59.30	33.279 E	-1.316 D	26.797	1441.8
59.8	60.15	33.304 E	-1.295 D	26.816	1441.9
60.8	61.25	33.357 E	-1.261 D	26.858	1442.1
61.8	62.25	33.392 E	-1.203 D	26.885	1442.5
62.8	63.35	33.431 E	-1.165 D	26.915	1442.7
63.8	64.15	33.441 E	-1.159 D	26.924	1442.8



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
64.8	65.45	33.447 E	-1.157 D	26.928	1442.8
65.8	66.25	33.448 E	-1.155 D	26.928	1442.9
66.8	67.45	33.478 E	-1.120 D	26.952	1443.1
67.8	68.25	33.548 E	-1.088 D	27.007	1443.3
68.8	69.50	33.588 E	-1.054 D	27.039	1443.6
69.8	70.30	33.600 E	-1.045 D	27.048	1443.7
70.8	71.35	33.633 E	-1.014 D	27.074	1443.9
71.8	72.55	33.648 E	-0.998 D	27.086	1444.0
72.8	73.40	33.661 E	-0.989 D	27.096	1444.1
73.8	74.60	33.667 E	-0.983 D	27.100	1444.1
74.8	75.55	33.672 E	-0.975 D	27.104	1444.2
75.8	76.55	33.682 E	-0.966 D	27.112	1444.2
76.8	77.40	33.705 E	-0.953 D	27.130	1444.3
77.8	78.60	33.711 E	-0.953 D	27.135	1444.4
78.8	79.65	33.712 E	-0.949 D	27.136	1444.4
79.8	80.60	33.726 E	-0.928 D	27.146	1444.5
80.8	81.60	33.749 E	-0.905 D	27.164	1444.7
81.8	82.50	33.766 E	-0.876 D	27.177	1444.9
82.8	83.60	33.789 E	-0.855 D	27.194	1445.0
83.8	84.70	33.800 E	-0.837 D	27.203	1445.1
84.8	85.70	33.808 E	-0.824 D	27.209	1445.2
85.8	86.80	33.823 E	-0.794 D	27.220	1445.4
86.8	87.70	33.838 E	-0.775 D	27.231	1445.5
87.8	88.85	33.860 E	-0.759 D	27.248	1445.7
88.8	89.80	33.865 E	-0.750 D	27.252	1445.7
89.8	90.80	33.871 E	-0.752 D	27.257	1445.7
90.8	91.90	33.875 E	-0.743 D	27.260	1445.8
91.8	92.75	33.878 E	-0.743 D	27.262	1445.8
92.8	93.90	33.889 E	-0.724 D	27.270	1445.9
93.8	94.80	33.900 E	-0.717 D	27.279	1446.0
94.8	95.75	33.904 E	-0.716 D	27.282	1446.0
95.8	96.90	33.908 E	-0.718 D	27.286	1446.0
96.8	97.85	33.910 E	-0.724 D	27.287	1446.0
97.8	98.90	33.909 E	-0.726 D	27.286	1446.0
98.8	100.05	33.912 D	-0.713 C	27.289	1446.1
99.8	100.90	33.918 D	-0.700 C	27.293	1446.2
100.8	102.00	33.923 D	-0.690 C	27.297	1446.3
101.8	102.90	33.925 D	-0.690 C	27.299	1446.3
102.8	104.05	33.927 D	-0.683 C	27.300	1446.3
103.8	104.95	33.950 D	-0.668 C	27.318	1446.5
104.8	106.05	33.954 D	-0.678 C	27.321	1446.4
105.8	107.00	33.961 D	-0.681 C	27.327	1446.5
106.8	108.10	33.973 D	-0.667 C	27.336	1446.6
107.8	109.00	33.984 D	-0.669 C	27.345	1446.6
108.8	110.10	34.002 D	-0.692 C	27.360	1446.5
109.8	111.10	34.005 D	-0.695 C	27.353	1446.5
110.8	112.00	34.007 D	-0.698 C	27.355	1446.5
111.8	113.25	34.011 D	-0.701 C	27.368	1446.5
112.8	114.05	34.014 D	-0.701 C	27.370	1446.6
113.8	115.30	34.015 D	-0.699 C	27.371	1446.6
114.8	116.15	34.018 D	-0.697 C	27.374	1446.6
115.8	117.20	34.021 D	-0.691 C	27.376	1446.7
116.8	118.30	34.027 D	-0.688 C	27.381	1446.7
117.8	119.25	34.030 D	-0.683 C	27.383	1446.7
118.8	120.20	34.037 D	-0.677 C	27.388	1446.8
119.8	121.25	34.040 D	-0.676 C	27.390	1446.8
120.8	122.45	34.036 D	-0.667 C	27.397	1446.9
121.8	123.20	34.043 D	-0.662 C	27.392	1446.9
122.8	124.35	34.049 D	-0.665 C	27.397	1446.9
123.8	125.40	34.049 D	-0.667 C	27.397	1446.9
124.8	126.45	34.051 D	-0.668 C	27.399	1447.0
125.8	127.35	34.051 D	-0.667 C	27.399	1447.0
126.8	128.35	34.051 D	-0.667 C	27.399	1447.0
127.8	129.55	34.051 D	-0.662 C	27.399	1447.0
128.8	130.40	34.055 D	-0.660 C	27.402	1447.1
129.8	131.60	34.056 D	-0.646 C	27.403	1447.2
130.8	132.35	34.063 D	-0.643 C	27.408	1447.2
131.8	133.45	34.065 D	-0.624 C	27.409	1447.3
132.8	134.50	34.068 D	-0.617 C	27.411	1447.4

DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
133.8	135.65	34.072 D	-0.617 C	27.414	1447.4
134.8	136.50	34.072 D	-0.615 C	27.414	1447.4
135.8	137.50	34.072 D	-0.613 C	27.414	1447.4
136.8	138.70	34.077 D	-0.614 C	27.418	1447.5
137.8	139.70	34.076 D	-0.615 C	27.417	1447.5
138.8	140.55	34.081 D	-0.620 C	27.422	1447.5
139.8	141.75	34.085 D	-0.598 C	27.424	1447.5
140.8	142.60	34.089 D	-0.593 C	27.427	1447.5
141.8	143.70	34.092 D	-0.595 C	27.429	1447.5
142.8	144.65	34.095 D	-0.591 C	27.432	1447.7
143.8	145.60	34.099 D	-0.586 C	27.435	1447.7
144.8	146.70	34.103 D	-0.585 C	27.438	1447.3
145.8	147.70	34.103 D	-0.581 C	27.437	1447.3
146.8	148.75	34.106 D	-0.582 C	27.440	1447.3
147.8	149.75	34.125 D	-0.576 C	27.455	1447.9
148.8	150.80	34.131 D	-0.576 C	27.460	1447.9
149.8	151.80	34.133 D	-0.573 C	27.462	1447.9
150.8	152.70	34.148 D	-0.576 C	27.473	1448.0
151.8	154.00	34.153 D	-0.576 C	27.477	1448.0
152.8	154.70	34.157 D	-0.576 C	27.481	1448.0
153.8	156.00	34.160 D	-0.575 C	27.484	1448.0
154.8	156.90	34.161 D	-0.572 C	27.484	1448.1
155.8	157.95	34.165 D	-0.571 C	27.487	1448.1
156.8	159.05	34.165 D	-0.568 C	27.487	1448.1
157.8	160.00	34.166 D	-0.567 C	27.488	1448.1
158.8	160.95	34.168 D	-0.566 C	27.489	1448.2
159.8	161.90	34.174 D	-0.555 C	27.493	1448.2
160.8	163.10	34.186 D	-0.540 C	27.503	1448.3
161.8	164.10	34.204 D	-0.514 C	27.516	1448.5
162.8	165.15	34.218 D	-0.495 C	27.527	1448.6
163.8	166.05	34.230 D	-0.488 C	27.536	1448.7
164.8	167.05	34.237 D	-0.487 C	27.542	1448.7
165.8	168.10	34.242 D	-0.479 C	27.545	1448.8
166.8	169.00	34.259 D	-0.468 C	27.559	1448.9
167.8	170.15	34.260 D	-0.466 C	27.560	1448.9
168.8	171.15	34.265 D	-0.464 C	27.563	1448.9
169.8	172.15	34.283 D	-0.447 C	27.577	1449.1
170.8	173.10	34.292 D	-0.438 C	27.584	1449.1
171.8	174.25	34.295 D	-0.434 C	27.587	1449.2
172.8	175.25	34.307 D	-0.423 C	27.596	1449.3
173.8	176.25	34.319 D	-0.416 C	27.605	1449.3
174.8	177.10	34.329 D	-0.405 C	27.612	1449.4
175.8	178.35	34.330 D	-0.398 C	27.613	1449.5
176.8	179.30	34.339 D	-0.391 C	27.620	1449.5
177.8	180.45	34.352 D	-0.381 C	27.630	1449.5
178.8	181.20	34.367 D	-0.363 C	27.641	1449.7
179.8	182.35	34.379 D	-0.350 C	27.650	1449.3
180.8	183.40	34.395 D	-0.324 C	27.666	1450.0
181.8	184.50	34.424 D	-0.297 C	27.684	1450.2
182.8	185.35	34.443 D	-0.272 C	27.698	1450.3
183.8	186.45	34.452 D	-0.259 C	27.705	1450.4
184.8	187.45	34.463 D	-0.253 C	27.714	1450.5
185.8	188.45	34.467 D	-0.248 C	27.717	1450.5
186.8	189.50	34.468 D	-0.243 C	27.717	1450.5
187.8	190.60	34.481 D	-0.229 C	27.727	1450.6
188.8	191.45	34.490 D	-0.218 C	27.734	1450.7
189.8	192.55	34.500 D	-0.200 C	27.741	1450.3
190.8	193.55	34.517 D	-0.195 C	27.755	1450.9
191.8	194.55	34.530 D	-0.174 C	27.764	1451.0
192.8	195.70	34.540 D	-0.156 C	27.772	1451.1
193.8	196.60	34.544 D	-0.151 C	27.775	1451.2
194.8	197.65	34.548 D	-0.147 C	27.777	1451.2
195.8	198.65	34.556 D	-0.140 C	27.784	1451.3
196.8	199.60	34.557 D	-0.135 C	27.784	1451.3
197.8	200.75	34.566 D	-0.131 C	27.791	1451.4
198.8	201.70	34.568 D	-0.123 C	27.792	1451.4
199.8	202.70	34.581 D	-0.112 C	27.802	1451.5
200.8	203.80	34.580 D	-0.107 C	27.801	1451.6
201.8	204.75	34.585 D	-0.105 C	27.805	1451.6



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
202.8	205.80	34.589 D	-0.097 C	27.808	1451.6
203.8	206.85	34.594 D	-0.094 C	27.812	1451.7
204.8	207.80	34.596 D	-0.093 C	27.814	1451.7
205.8	208.85	34.595 D	-0.090 C	27.813	1451.7
206.8	209.80	34.601 D	-0.088 C	27.817	1451.8
207.8	210.90	34.602 D	-0.087 C	27.818	1451.8
208.8	211.80	34.603 D	-0.082 C	27.819	1451.8
209.8	212.80	34.606 D	-0.080 C	27.821	1451.9
210.8	214.05	34.611 D	-0.078 C	27.825	1451.9
211.8	214.90	34.615 D	-0.060 C	27.827	1452.0
212.8	215.95	34.624 D	-0.054 C	27.835	1452.1
213.8	217.00	34.635 D	-0.039 C	27.843	1452.2
214.8	218.05	34.637 D	-0.036 C	27.844	1452.2
215.8	218.85	34.640 D	-0.035 C	27.846	1452.2
216.8	219.95	34.643 D	-0.032 C	27.848	1452.3
217.8	221.20	34.644 D	-0.031 C	27.849	1452.3
218.8	222.10	34.645 D	-0.030 C	27.850	1452.3
219.8	223.10	34.645 D	-0.029 C	27.850	1452.3
220.8	224.00	34.647 D	-0.028 C	27.852	1452.3
221.8	225.20	34.648 D	-0.029 C	27.852	1452.4
222.8	226.20	34.650 D	-0.024 C	27.854	1452.4
223.8	227.20	34.651 D	-0.023 C	27.855	1452.4
224.8	228.15	34.651 D	-0.022 C	27.854	1452.4
225.8	229.05	34.652 D	-0.021 C	27.855	1452.5
226.8	230.35	34.656 D	-0.020 C	27.858	1452.5
227.8	231.25	34.654 D	-0.015 C	27.856	1452.5
228.8	232.35	34.657 D	-0.011 C	27.859	1452.6
229.8	233.20	34.659 D	-0.005 C	27.860	1452.6
230.8	234.25	34.668 D	-0.004 C	27.867	1452.7
231.8	235.30	34.671 D	-0.002 C	27.870	1452.7
232.8	236.25	34.670 D	0.001 C	27.868	1452.7
233.8	237.45	34.673 D	0.003 C	27.871	1452.7
234.8	238.40	34.673 D	0.020 C	27.870	1452.8
235.8	239.40	34.675 D	0.021 C	27.872	1452.9
236.8	240.45	34.677 D	0.027 C	27.872	1452.9
237.8	241.50	34.680 D	0.031 C	27.875	1452.9
238.8	242.50	34.682 D	0.036 C	27.877	1453.0
239.8	243.55	34.691 D	0.043 C	27.883	1453.1
240.8	244.35	34.694 D	0.045 C	27.885	1453.1
241.8	245.50	34.697 D	0.048 C	27.888	1453.1
242.8	246.40	34.698 D	0.049 C	27.889	1453.1
243.8	247.50	34.701 D	0.055 C	27.890	1453.2
244.8	248.55	34.704 D	0.060 C	27.893	1453.2
245.8	249.60	34.707 D	0.062 C	27.895	1453.3
246.8	250.70	34.711 D	0.062 C	27.898	1453.3
247.8	251.65	34.710 D	0.063 C	27.898	1453.3
248.8	252.70	34.713 D	0.064 C	27.900	1453.3
249.8	253.55	34.714 D	0.071 C	27.901	1453.4
250.8	254.65	34.717 D	0.076 C	27.902	1453.4
251.8	255.55	34.719 D	0.077 C	27.904	1453.4
252.8	256.70	34.723 D	0.078 C	27.907	1453.5
253.8	257.65	34.725 D	0.081 C	27.909	1453.5
254.8	258.70	34.726 D	0.086 C	27.909	1453.5
255.8	259.80	34.730 D	0.088 C	27.912	1453.6
256.8	260.80	34.733 D	0.092 C	27.915	1453.6
257.8	261.85	34.734 D	0.092 C	27.915	1453.6
258.8	262.85	34.736 D	0.094 C	27.917	1453.7
259.8	263.90	34.737 D	0.096 C	27.918	1453.7
260.8	264.85	34.741 D	0.096 C	27.921	1453.7
261.8	266.00	34.743 D	0.100 C	27.922	1453.8
262.8	266.90	34.743 D	0.102 C	27.922	1453.8
263.8	267.95	34.745 D	0.104 C	27.924	1453.8
264.8	269.00	34.746 D	0.105 C	27.925	1453.8
265.8	270.05	34.748 D	0.108 C	27.926	1453.9
266.8	270.90	34.750 D	0.110 C	27.927	1453.9
267.8	271.85	34.751 D	0.111 C	27.928	1453.9
268.8	272.95	34.752 D	0.112 C	27.929	1453.9
269.8	274.05	34.752 D	0.113 C	27.928	1454.0
270.8	274.95	34.755 D	0.112 C	27.931	1454.0



DEPTH	PRESS	SAL	TEMP	SIGMAT	SOUND
271.8	275.90	34.753 D	0.113 C	27.930	1454.0
272.8	277.05	34.751 D	0.114 C	27.928	1454.0
273.8	278.10	34.751 D	0.115 C	27.928	1454.0
274.8	279.15	34.755 D	0.112 C	27.932	1454.0
275.8	280.10	34.756 D	0.115 C	27.932	1454.1
276.8	281.15	34.758 D	0.119 C	27.933	1454.1
277.8	282.20	34.764 D	0.128 C	27.938	1454.2
278.8	283.10	34.767 D	0.131 C	27.940	1454.2
279.8	284.25	34.768 D	0.131 C	27.941	1454.2
280.8	285.10	34.769 D	0.131 C	27.941	1454.2
281.8	286.35	34.769 D	0.131 C	27.942	1454.3
282.8	287.30	34.768 D	0.132 C	27.940	1454.3
283.8	288.15	34.771 D	0.132 C	27.943	1454.3
284.8	289.40	34.771 D	0.134 C	27.943	1454.3
285.8	290.30	34.775 D	0.143 C	27.946	1454.4
286.8	291.25	34.780 D	0.149 C	27.950	1454.4
287.8	292.45	34.782 D	0.153 C	27.951	1454.5
288.8	293.25	34.785 D	0.154 C	27.953	1454.5
289.8	294.35	34.784 D	0.154 C	27.952	1454.5
290.8	295.45	34.786 D	0.153 C	27.954	1454.5
291.8	296.45	34.785 D	0.155 C	27.953	1454.6
292.8	297.45	34.785 D	0.157 C	27.953	1454.6
293.8	298.35	34.788 D	0.167 C	27.955	1454.7
294.8	299.55	34.805 D	0.182 C	27.967	1454.8
295.8	300.60	34.807 D	0.182 C	27.969	1454.8
296.8	301.40	34.807 D	0.184 C	27.969	1454.8
297.8	302.55	34.809 D	0.184 C	27.971	1454.8
298.8	303.45	34.810 D	0.183 C	27.972	1454.8
299.8	304.65	34.809 D	0.184 C	27.971	1454.9
300.8	305.65	34.810 D	0.183 C	27.972	1454.9
301.8	306.50	34.811 D	0.184 C	27.973	1454.9
302.8	307.75	34.811 D	0.185 C	27.972	1454.9
303.8	308.70	34.808 D	0.184 C	27.970	1454.9
304.8	309.70	34.808 D	0.185 C	27.970	1454.9
305.8	310.60	34.811 D	0.184 C	27.973	1455.0
306.8	311.65	34.810 D	0.185 C	27.971	1455.0
307.8	312.85	34.813 D	0.188 C	27.974	1455.0
308.8	313.75	34.815 D	0.193 C	27.975	1455.1
309.8	314.75	34.818 D	0.197 C	27.978	1455.1
310.8	315.80	34.821 D	0.198 C	27.980	1455.1
311.8	316.70	34.822 D	0.198 C	27.980	1455.1
312.8	317.70	34.823 D	0.198 C	27.981	1455.2
313.8	318.85	34.823 D	0.198 C	27.982	1455.2
314.8	319.95	34.823 D	0.199 C	27.981	1455.2
315.8	320.95	34.827 D	0.201 C	27.985	1455.2
316.8	321.95	34.826 D	0.199 C	27.984	1455.2
317.8	322.95	34.826 D	0.199 C	27.983	1455.3
318.8	324.05	34.826 D	0.199 C	27.984	1455.3
319.8	324.95	34.828 D	0.203 C	27.985	1455.3
320.8	325.95	34.827 D	0.200 C	27.984	1455.3
321.8	326.95	34.827 D	0.202 C	27.984	1455.3
322.8	327.90	34.831 D	0.204 C	27.988	1455.4
323.8	328.90	34.832 D	0.204 C	27.988	1455.4
324.8	329.90	34.833 D	0.204 C	27.989	1455.4
325.8	330.95	34.834 D	0.204 C	27.990	1455.4
326.8	332.05	34.834 D	0.204 C	27.990	1455.4
327.8	333.20	34.832 D	0.204 C	27.989	1455.5
328.8	334.20	34.834 D	0.203 C	27.990	1455.5
329.8	335.15	34.834 D	0.205 C	27.990	1455.5









CA1 EP 321

-76 R21

# **SALINITY IN PHYSICAL OCEANOGRAPHY**

by  
**E.R. Walker**



**INSTITUTE OF OCEAN SCIENCES, PATRICIA BAY**  
**Victoria, B.C.**

For additional copies or further information, please write to:

Environment Canada  
Institute of Ocean Sciences, Patricia Bay  
512 - 1230 Government Street  
Victoria, B.C.  
V8W 1Y4



DAVID E. S.

-76-21

Government  
Publication

*Pacific Marine Science Report 76-21*

SALINITY IN PHYSICAL OCEANOGRAPHY

by

E.R. Walker

Institute of Ocean Sciences, Patricia Bay  
Victoria, B.C.

September 1976

This is a manuscript which has received only limited circulation. On citing this report in a bibliography, the title should be followed by the words "UNPUBLISHED MANUSCRIPT" which is in accordance with accepted bibliographic custom.



## ABSTRACT

This note reviews briefly the present status of salinity usage and procedures in physical oceanography. In the very near future changes in salinity definitions and formulations may be necessary because of the probable introduction of a new equation of state for sea water. An outline is given of some considerations which may be necessary in devising changes to present procedures.





## THE PROBLEM

As water is an extraordinarily good solvent, it is not surprising that the oceans, which have existed for aeons, have dissolved in them elements of which the earth is composed. In 1822 the chemist Marcet suggested, "For the ocean, having communication with every part of the earth through the rivers, all of which ultimately pour their waters into it; and soluble substances, even such as are theoretically incompatible with each other, being almost in every instance capable of coexisting in solution, I could see no reason why the ocean should not be a general receptacle for all bodies which can be held in solution."<sup>1</sup> Today, only about a dozen of the stable elements have not as yet been analyzed in seawater. Two elements were initially discovered in the marine environment: iodine and bromine (Goldberg 1975).

This saltiness, or salinity, of sea water is used by physical oceanographers to estimate densities which enter their equations. Salinity being quasi-conservative is also used as a tracer. The physical oceanographic community is wrestling at the moment with a problem, having to do with practical measurements of salinity and/or density in a standardized way to a precision of a few parts per million of the density of sea water (or of the order of  $10^{-4}$  of the weight of dissolved chemicals).

A recent publication of abundances of chemical elements dissolved in sea water is shown in Table 1(a) (after Horne 1969). Salinity, the total of (inorganic) dissolved substances is obviously gravimetrically defined. Many of the dissolved substances are disassociated. The principal ions are shown in Table 1(b) (after Wilson (1975)). Because true salinity is difficult to measure, a measurable salinity was defined as "the weight of inorganic salts in one kilogramme of sea water when all bromides and iodides are replaced by an equivalent quantity of chlorides and all carbonates are replaced by an equivalent quantity of oxides"<sup>2</sup>, and for convenience this was related to chlorinity by Forch et al (1902), in a slightly different way by Cox et al (1967) and to electrical conductivity in the definitions in the International Oceanographic Tables (UNESCO 1971). Lyman and Fleming (1940) in a re-examination of Dittmar's (1884) and Knudsen's (1901) work defined a "sum of major ions" to represent sea water salinity although as they noted "as only the major constituents have been discussed the so-called plant nutrients and heavy metals are lacking." The total solids in sea water have also recently been estimated by Millero et al (1976b). According to Fofonoff (1962, p 6) Lyman and Fleming (1940) also estimated the total salt content. The relationships between these various estimates or approximations to the true salinity of sea water is given in Table 2. These relationships have recently been discussed by Tsurikova and Tsurikov (1971), Yerofeyev et al (1975), and Millero et al (1976b).

Salinity of sea water influences various physical and chemical properties of water. Physical properties affected include solubility of gases such as oxygen (UNESCO 1973, Carpenter (1966), Murray and Riley (1969)), nitrogen (Weiss (1970), Murray and Riley and Wilson (1969)), and argon (Weiss (1970), Douglas (1964, 1965)), isothermal compressibility (Lepple and Millero (1971), Wang and Millero (1973), Fine, Wang and Millero (1974)), thermal expansion (Bradshaw and Schleicher (1970), Caldwell and Tucker (1970), Fine, Wang and Millero (1974)), and specific heat (Millero et al (1973), Cox and Smith (1959),

<sup>1</sup> As quoted by Goldberg 1975

<sup>2</sup> By Sorensen (see Wallace, 1974, p. 144)

Bromley et al (1967, 1970)). Also affected are the velocity of sound in sea water (Kroebe and Mahrt (1975), Kuwahara (1939), Wilson (1960), Del Grosso (1974)), thermal conductivity (Castelli et al (1974)), freezing point (Fujino et al (1974), Doherty and Kester (1974)), boiling point elevation (Stoughton and Lietzke (1967)), osmotic pressure (Robinson (1954)), vapour pressure lowering (Robinson (1954)), surface tension (Fleming and Revelle (1939)), viscosity (Korson et al (1969), Millero (1974a)), refractive index (Rusby (1967), Stanley (1971)), speed of light (Sager (1974)), electrical conductivity, (Thomas et al (1934), Reeburgh (1965), Cox et al (1967), Brown and Allentoft (1966), Bradshaw and Schleicher (1965), Kozlovskaya et al (1974), Janz and Singer (1975)), and density (Forch et al (1902), Thompson and Wirth (1931), Bein et al (1935), Cox et al (1970), Kremling (1972), Millero and Lepple (1973), Millero et al (1976a)). The salinity affects chemical properties of course, including chlorinity, a measure of the total halide content which is "related to a property of sea water that in some way involves the sum of that property contributed by all the dissolved substances" (Carritt (1963)).

The practical problem arises because the measurements made to estimate the true salinity are measuring slightly different parameters of the true salinity. If the constituents of sea water were everywhere in the same proportion, at all times, these relationships could be sorted out once and for all. However the constituents of sea water vary in space and, locally at least, perhaps in time (Millero et al (1976a), Kremling (1976 personal communication)). Measurements are now becoming so precise that these differences are important. This is particularly so in the case of salinity measurements for use in computing density, the parameter of great interest to physical oceanographers.

This note briefly reviews the history of the 'salinity concept', notes the facts as presently understood, and outlines present oceanographic procedures, for measuring or estimating sea water salinity and density.

## THE PAST

The recent text, "The development of the Chlorinity-Salinity Concept in Oceanography" by Wallace (1974) traces the increasingly sophisticated ideas and techniques which by the end of the nineteenth century had resulted in values and concepts of solutes in the oceans many of which are still current. Wallace quotes Aristotle who was aware of many qualities of sea water as they differed from those of fresh water, but was unable to answer the conundrum; why is the sea salty? If the rivers brought the salt why are they not salty? As with other subjects, valid ideas did not progress beyond Aristotle's hypotheses for hundreds of years. Robert Boyle in the 17th century in "Observations and Experiments on the Saltiness of the Sea" cleared up Aristotle's cloudy ideas by attributing the sea waters' salt content to that dissolved from the rocks of the earth's surface.

In the work of the 18th century Swedish chemist, T. O. Bergman are found the embryos of present techniques which precipitate sea salts. Most chemists hitherto had evaporated (or distilled off) the water, with downgrading of quantitative accuracy. Marcet in 1819 made the first suggestion of



the relative constancy of the composition of sea water. The great French chemist, J. L. Guy-Lussac, entered the field of sea water analysis briefly and decided, on the basis of inadequate data, that the "salinity variation in the open ocean (Atlantic) is small, if salinity is not the same everywhere."<sup>3</sup>

Between 1843 and 1865 the Danish chemist, J. G. Forchhammer published several milestone papers on the composition of sea water. His techniques were gravimetric, he did not use the evaporation method. He used data from all over the world, and compared his results for these different waters. Forchhammer introduced the word 'salinity'. He believed that the overall salinity of the open ocean was more or less constant. Endorsing the concept of constancy of proportionality he proposed "an analysis scheme in which the quantity of chlorine was determined for every sample by titration, and from that the quantity of salt deduced by multiplication with the determined coefficient 1.812 (relating chlorinity to salinity)."<sup>4</sup> The modern tone of this quotation is very evident.

In the years 1873-1876 H.M.S. Challenger sailed almost 69,000 miles about the world making oceanographic observations. Seventy-seven salinity samples were collected from various depths. They were analyzed by W. Dittmar, in "the most extensive sea water analysis performed before, or since".<sup>5</sup> Dittmar's analysis used Forchhammer's analysis scheme with the Volhard extension. Dittmar believed his results indicated the percentage composition of the dissolved material is almost the same (in the Challenger samples), although his analysis was precise enough to lead him to believe that the proportion of lime increases with depth. As for the 'constant' relating of salinity to chlorinity Dittmar's analysis of the Challenger samples gave a value of 1.8058. Dittmar recommended estimating the total solids in this way. At almost the same time H. Tornoe analyzed samples from the Norwegian North Atlantic Expedition of 1876-1878. His procedures were largely the same as those of Dittmar. Tornoe estimated coefficients of chlorine (amount of salt/amount of chlorine) and of specific gravity (amount of salt/(specific gravity-1)).

The concepts noted above were generally accepted by the late nineteenth century but the values of the coefficients of chlorine and specific gravity were uncertain. Meetings were called in Stockholm in 1899, and in Christiania (Oslo) in 1901 to standardize the manner by which chlorine in sea water should be determined and to standardize the values of the coefficients noted above. Chosen to resolve these matters was Martin Knudsen. The studies consisted of four parts. Twenty-four samples of sea water were available, in which the waters around northern Europe were much over-represented but which attempted to cover a wide range of salinity values. Chlorine content of the samples was determined by titration using the Mohr method by the Swedish chemist, S. P. L. Sorensen and graduate students. Sorensen determined the sample salinities gravimetrically by evaporation techniques with allowances for its imperfections. The equation relating salinity and chlorinity ( $S = 1.805 Cl + 0.030$ ) was based on nine samples from these studies. Knudsen determined the specific weights of the samples. C. Forch determined the volume expansion of sea water. In a remarkably short time the results of these studies were published in the famous "Hydrographical Tables", of 1901 relating chlorinity, salinity and density of sea water. These tables have been in use for seventy years. Although hurriedly obtained (Knudsen mentioned that some

<sup>3</sup> quoted by Wallace 1974, p. 93

<sup>4</sup> quoted by Wallace 1974, p. 112

<sup>5</sup> Wallace 1974, p. 121

precision in the chlorine determinations had been sacrificed because of the pressure of time), the results have stood the test of time very well. The main fault in the studies, perhaps, is the non-representative and too-small sample of sea water considered.

As noted by Cox (1963) the work of Knudsen et al was so well accepted that only relatively minor changes have been made in the Knudsen titration procedures; the introduction of mechanical stirrers, a fluorescein instead of a Mohr's potassium chlorate indicator, and electrometric end-point apparatus. A change to the definition of chlorinity was introduced to tie the value to the atomic weight of silver (Jacobsen and Knudsen 1940). An attempt by Guntz and Kocher (1952) to improve the actual salinity determination by addition of a weighed excess of sodium fluoride before evaporation was pursued by Morris and Riley (1964) with indifferent results.

During the present century precision attainable by physical measurements improved markedly. Since 1930 and particularly since 1955 salinity determination by measuring the electrical conductivity of sea water has come into prominence until at present (1975) many more determinations of salinity are made by the conductivity measurements than by chemical titrations. From the development of crude laboratory salinometers after 1930 (Wenner, Smith and Soule) have come the convenient laboratory salinometers of the present which can give highly reproducible results. As noted by Cox (1963) even the earlier models of these salinometers were capable of giving more reproducible results than chemical titrations (particularly at sea).

Since the great advances in electronics which began after the introduction of solid state devices in the 1950's, instruments measuring electrical conductivity, temperature and pressure, in-situ, have become increasingly reliable. The in-situ instruments face the handicap of being forced to operate in sea water at high pressures. The latest instruments (Guildline #8100 (1975)) are almost as sensitive as the best laboratory salinometers but because of the operating environment are rated by the manufacturer as giving an accuracy of about  $0.01\text{‰}$  in salinity. The practical advantages of making measurements by in situ devices are that quasi-continuous vertical, horizontal or porpoising measurements are possible. Because of the logistics involved the number and continuity of salinity measurements made from water samples is quite limited compared to measurements from in situ devices.

Use of electrical conductivity devices in situ requires adequate knowledge of the relationship between salinity, temperature, electrical conductivity and pressure over the ranges encountered in the ocean. As noted by Montgomery (1958) 75 percent of ocean water has  $0 \leq T \leq 6^{\circ}\text{C}$ ,  $34 \leq S \leq 35\text{‰}$ , although the total sea water range is  $-2 \leq T \leq 36^{\circ}\text{C}$ , and  $0 \leq S \leq 44\text{‰}$ . Leroy (1969) has indicated how quickly the temperature and salinity ranges narrow with increasing depth (or pressure). In the author's mind there is need to organize this material as background to the assembling of basic data for possible new salinity formulations.

Although emphasis to date has been on chlorinity and electrical conductivity techniques to estimate salinity, other approaches are possible, perhaps through the speed of sound measurements (Gytte, personal communication). Indeed salinometers using salinity effects upon the refractive index are



commercially available (American Optical Corp. Buffalo, N. Y., Endeco, Marion, Mass.). Consideration of the relationship between salinity and physical parameters for which measurements may be possible suggests that other techniques for salinity investigations may eventually be available. The size of salinity effects on selected seawater parameters roughly shown by the values of the first terms in an expansion around  $35\text{‰}$ ,  $15^{\circ}\text{C}$ ,  $0\text{ db}$  are given in Table 3. These values vary over the range of variables, but Table 3 does indicate that other measurements may eventually be used to estimate sea water salinity. Of course the possibility of development of completely different techniques is always present. However at present the estimation of salinity by measurement of electrical conductivity, and, as necessary, temperature and pressure, is pre-eminent.

#### THE PRESENT

The method to obtain salinity most widely used at this time is to measure conductivity of sea water. For in-situ measurements concurrent recording of temperature and pressure are also necessary, as may be seen from the conductivity data in Table 3. The data base from which procedures for salinity calculations are developed should be a fourth dimensional matrix from which by mathematical fitting techniques we obtain  $S = f(C, T, P)$ . The requirement for the data points is that their experimental errors are small, and that the points are dense enough and extensive enough. The definitions and conventions used for  $S$ ,  $C$ ,  $T$ ,  $P$  must be unambiguous. Because relative values are more easily and accurately determined than absolute values the absolute conductivity values are in practice replaced by electroconductivity values relative to that of some standard.

The standard, universal at present, is "standard" sea water either Copenhagen or Russian. These standard sea waters are gathered from near-surface layers in mid-ocean, carefully treated and stored in special glass ampoules. The chlorinity of each batch or series is marked on each ampoule. The salinity is obtained by the chlorinity-salinity relationships of Knudsen (Forch et al (1902)) or the 1971 UNESCO relationship, which agree at  $S = 35\text{‰}$ .

The question of the electrical conductivity of standard sea water as related to salinity determined by chlorinity has been investigated by Park (1964) and by Selifonova et al (1973) (as reported by Yerofeyev et al (1975)). The latter investigation upon 53 batches of Soviet standard sea water with storage times up to 16 years showed a maximum deviation between salinity calculated from chlorinity and salinity calculated from conductivity of  $0.010\text{‰}$ . Two other batches had discrepancies of  $0.008\text{--}0.009\text{‰}$ , the rest less than  $0.006\text{‰}$ . Park over a series of Copenhagen standard sea water batches from  $P_{15}$  (1937) to  $P_{37}$  (1962) found discrepancies between chlorinity-derived and conductivity-derived salinities of up to  $0.017\text{‰}$ . His results showed a mean deviation of  $+0.004\text{‰}$  and a root mean square deviation about the mean of  $0.005\text{‰}$ . Park's data showed a variation in the discrepancies with the various batches. Discrepancies between the different batches of Copenhagen standard sea water since the end of Park's series (1962) are



presently under investigation (Poisson, Dauphinee, Culkin, Millero, private communication) and results from these investigations may well lead to tighter control of all aspects of standard sea water.

The question of the stability of these standards has been investigated by Park (1964). They suffer no degradation during storage over years. Prolonged intensive freezing of standard sea water can result in irreversible chemical changes which may cause a lowering of conductivity-measured salinities of  $-0.02\text{‰}$  (R. A. Lake, personal communication).

At present calculation practice tends to evaluate  $S = S(R_{STP}, T, P)$  in steps as follows:

$$S = S(R_{15}) = S'(R_C, T)$$

where  $R_C = C(S, T, 0) / C(35, T, 0) = R_{STP} / R_P \cdot R_T$

and  $R_P = C(S, T, P) / C(S, T, 0) = R_P(S, T, P)$

$$R_T = C(35, T, 0) / C(35, 15, 0) = R_T(T)$$

$$R_{STP} = C(S, T, P) / C(35, 15, 0) = R_P \cdot R_C \cdot R_T \text{ is measured in situ.}$$

The term  $R_P$  is evaluated from data of Bradshaw and Schleicher (1965) and because an estimate of  $S$  is necessary, iteration may be required. Bennett (1976) and Walker and Chapman (1973) are of the opinion that this data base needs broadening, since it covers a salinity range of only  $31\text{--}39\text{‰}$ . The term  $R_T$ , containing most of the variation of conductivity with temperature is usually evaluated from the data of Brown and Allentoft (1966).

The expression for  $S'$  is evaluated from data of Brown & Allentoft (1966) or Cox et al (1967). These data sets are in agreement (Cox et al (1967), Bennett (1976)), although experimental procedures differed and the data of Cox et al (1967) is restricted in coverage. The experimental differences included the method of dilution of  $S = 35\text{‰}$  sea water, Brown and Allentoft using distilled water, Cox et al natural sea waters. These data bases are undergoing intensive examination at the moment (Dauphinee, personal communication) and it may be they will have to be replaced in part at least.

As a historical note we summarize five more formulations for calculating salinity from present data, while recognizing that they and all others may well be obsolete very shortly. The data bases upon which present formulations rest were discussed in Walker and Chapman (1973) amongst others, and a brief summary is given in Table 4. The data of Millero et al (1976b) are not elaborated in the same detail as data of Brown and Allentoft (1966) or Cox et al (1967).

Working equations relating salinity to conductivity, temperature and pressure were reviewed by Greenberg (1972), Walker and Chapman (1973), and Yerofeyev et al (1975). Recent publications by Ribe and Howe (1975),

Fofonoff et al (1974), Millero et al (1976b) are examples of rather elaborate fits. The recent note of Bennett (1976) provides working equations allowing use of a small computer for data processing. A routine SALINI, coded in England is also included.

The five formulations were compared in the same manner as was done with other formulations in Walker and Chapman (1973). The claims for accuracy and ranges of validity of the formulations are given in Table 5. The formulae were first tested against the International Oceanographic Tables (UNESCO 1971) at  $T = 15^{\circ}\text{C}$ ,  $P = 0$  db. Values of  $R_{15} = C(S, 15, 0)/C(35, 15, 0)$  taken from the tables were entered into the formulae to give the results shown in Table 6. Exactly the same procedure was followed using values of  $R_{15}$  interpolated from Table 21 in Brown and Allentoft (1966) and the results are shown in Table 7. For SALINI the value provided for  $C(35, 15, 0)$  was 42.896 mmho/cm. The temperatures used in all data refer to the IPTS-48 scale (Comité International des Poids et Mesures (1969)). Bennett's formulations use the IPTS-68 temperature scale so before comparison data temperatures were adjusted by his relationship

$$T_{68} = T_{48} (0.999512) + T_{48}^2 (5.8 \times 10^{-6})$$

as was his value of

$$C(35, 15^{\circ}\text{C } T_{68}, 0) = 1.000138 C(35, 15^{\circ}\text{C } T_{48}, 0).$$

Fofonoff et al apparently, if using  $T_{68}$ , convert before calculating salinity by the relationship

$$T_{48} = T_{68} + 4.4 \times 10^{-6} T_{68} (100 - T_{68})$$

as does the routine SALINI using

$$T_{48} = T_{68} (1.000488) - T_{68}^2 (5.8 \times 10^{-6})$$

For Ribe and Howe and Millero et al the scale  $T_{48}$  was used (which may be unfair to Millero et al). The RIBE-HOWE formulation is similar to their previous equation, but incorporates a correction for salinities below 20‰.

For a coarse test of the fit of the formulae to Brown and Allentofts' data and UNESCO Tables, comparisons at a wide range of temperatures and at both atmospheric and elevated pressures were made in the following manner. From Brown and Allentofts' tables of experimental data values of  $C(S, T, 0)/C(35, T, 0)$  were found directly. Values of salinity corresponding to values in Brown and Allentofts' Table 23 were found by interpolation in their Table 21. Values at  $T = -1, -2^{\circ}\text{C}$  were found by extrapolation using a Gaussian routine supplied with the HP 9100 desk calculator. These were then multiplied by the factor  $C(35, T, 0)/C(35, 15, 0)$  from Brown and Allentofts' Table 24 to give  $R'_{15} = C(S, T, 0)/C(35, 15, 0)$ . These values of  $R'_{15}$  were then fed back into each formulation. Tables of differences between experimental data and the salinities calculated from the formulae are shown in parts (a) of Tables 8 to 12. For parts (b), (c), (d) of these tables the input data have been adjusted to pressures of 1000 db, 2000 db, and 5000 db, respectively, using equation (1) of Bradshaw and Schleicher (op.cit.). Tables 13 to 17 are similar comparisons with the UNESCO Tables. In this case the ratio  $C(S, T, 0)/C(35, T, 0)$  from the tables was multiplied by the experimental factors  $C(35, T, 0)/C(35, 15, 0)$  from Brown and Allentofts' Table 24. As MILLERO contains no pressure dependence Bradshaw and Schleicher's equations were used in Tables 9 and 14 for elevated pressures. (Walker and Chapman, 1973).



During examination of these tables, a number of points must be kept in mind. The values at temperatures colder than 0°C are fictitious at lower salinities and include small effects due to the method of extrapolation. Since Bradshaw and Schleicher's pressure effect data is valid only over a salinity range from 31 to 39‰, values elsewhere given by their equations are extrapolations. Therefore the tables at elevated pressures outside this salinity range noted merely indicate whether or not the different formulations of the pressure effects extrapolate in the same way as does the equation of Bradshaw and Schleicher. Also, as noted above the natural range of salinities and temperatures at elevated pressures are much smaller than those shown in the tables. Again since the FOFONOFF formulation uses the International Oceanographic Table values and Bradshaw and Schleicher's (1965) pressure effect equations directly, departure from values of 0.000 in Table 16 at any depth implies lack of precision in the convergence in calculation of the pressure effects, or in the input data.

The formulations MILLERO (and from Walker and Chapman (1973)), PERKIN-WALKER and BROWN are fitted to sea water corresponding to standard (or mid-ocean) sea water evaporated or diluted by distilled water while the others better fit the type of sea water used by Cox et al (1967) to prepare material for the International Oceanographic Tables. It may be noted that in these comparisons and also in Walker and Chapman (1973), the standards are the data of Brown and Allentoft (1966) and the International Oceanographic Table material, which is only a fit to data of Cox et al (1967). The main differences between the two data sets due to the different methods of specifying salinity are seen in Table 7, for example in the comparison of FOFONOFF which fits the International Oceanographic Table values exactly with the values of Brown and Allentoft. In addition to this major difference there are other smaller differences due to experimental error and procedures which have been discussed by Cox et al (1967) and Walker and Chapman (1973).

Dr. T. M. Dauphinee of Canada's National Research Council, Ottawa, had found (personal communication) that corrections of size to 0.02‰ should be added to extrapolations from Brown and Allentoft's data (1966) to temperature below 0°C. Dr. Dauphinee is at present extending his study, and it may well be that his results will change to an important degree the two data bases and render the formulations discussed hitherto obsolete. However, the crude comparisons made here indicate (vide Bennett (1976)), that even compact formulations should have errors of fit to the appropriate data base of size not greater than 0.004‰ r.m.s. The different formulations are listed after Table 17. The Fortran coding is not necessarily the most efficient, but is laid out for easy comparison with equations in the original papers.

Although this is slightly aside from the theme of this note, the reports of Fofonoff et al (1974), Roden and Irish (1975), Bonnot (1971) and Goulet and Culverhouse (1972), Lewis and Sudar (1972), and Federov and Prokhorov (1972) indicate that errors from improper operation and standardization of a CTD system may be much more important than relationships between salinity and conductivity. All aspects of the system operation, both static, and in the case of moving in situ instrumentation, dynamic calibrations must be considered, also data transmission, data sampling, data logging. Incidentally it has proved possible to measure the time constants of electrode-type systems rather simply (Walker 1972) at least for near surface pressures. With improved in situ instrumentation this is probably necessary only for some unusual configuration, or one changed from the manufacturer's standard.



The main impetus for developing a standard formulation at this time (apart from tidying up the messy plethora of miscellaneous formulations) arises from recent investigations into the equation of state of seawater.

The standard equation of state, and formulations for density, or more accurately specific volume, again were derived near the turn of the century. As described by Fofonoff and Bryden (1975) the  $\sigma_0$  data of Knudsen, the thermal expansion data of Forch et al, (1902) were used to produce values of the specific gravity of sea water over a range of temperature and salinity (or chlorinity) at atmospheric pressure. These were later combined with the compressibility data of Ekman (1908) to provide specific gravity values at elevated pressures.

Other more recent measurements or estimates of sea water density or specific gravity made in various ways include work by Wilson and Bradley (1968), Thompson and Wirth (1931), Bein et al (1935). More recently Kremling (1972) using a vibrating densimeter, and Cox et al (1970) using a sinker, determined the specific gravity of natural sea waters, and concluded that the values in the Hydrographical Tables of Knudsen et al (1901) were too low by about 0.010 in  $\sigma$ . Fofonoff and Bryden (1975) carried out a mathematical exercise on edited data from Knudsen (1901), Cox et al (1970) and Kremling (1972) and the mathematical expressions that these authors had fitted to their data. They came up with no systematic differences between the edited data sets, but concluded that the data sets were inadequate for salinities less than 10‰, and for temperatures below 0°C and above 25°C.

The most active workers currently investigating the equation of state for sea water are at the Rosenstiel School of Marine and Atmospheric Science, University of Miami, Chen and Millero (1975), Emmet and Millero (1974, 1975), Fine et al (1974), Lepple and Millero (1971), Millero, (1967a, 1967b, 1973a, 1973b, 1974a, 1974b, 1974c, 1975a, 1975b, 1975c, 1975d), Millero et al (1973, 1975, 1976a, 1976b), Millero and Lepple (1973)). As may be guessed their output is huge. The kernel of their output, for the purpose of this section is contained in Millero et al (1976b). In this paper the relative density of a large number of samples of diluted (with distilled water) or evaporated standard sea water was obtained by magnetic float, or by suspension balance techniques. The data covered a wide range of temperature and salinity at atmospheric pressure. The results included comparisons with the other data noted above. It was concluded that mid-ocean waters behaved like standard sea water evaporated or diluted with distilled water, but that coastal or inland sea waters behaved differently from mid-ocean sea water and needed equations of the Knudsen form, although A and B are not necessarily constant.

$$S = A + B(Cl)$$

This point was amplified in Millero et al (1976a) where it was concluded "at the same dissolved solid concentrations the physical-chemical properties of rivers, lakes, seas and estuaries are equal to those of sea water diluted with pure water." Further evidence is found in Kremling and Millero (1975) investigating the density of Baltic Sea waters. Again the statement is made that "the densities of a natural estuary are equal to those of sea water diluted with pure water if they are compared at the same (true) salinity."

The density equations developed by Millero and his group incorporated salinity in the form of  $S = 35\text{‰}$  sea water diluted with distilled water (or evaporated). If the equation of state relationships developed by this group are adapted as standard (Grasshoff 1976) then there is benefit considering (a practical) salinity defined in this way to define relationships with measured parameters of sea water.

#### POSSIBILITIES

There is the question; whether the present situation of a gravimetrically-based definition of true or total salinity accompanied by a working approximation which can be related to measurements, chemical, physical or other, is to continue. The form of the working approximation must be decided, whether it is to remain the "dry residue" salinity (S) of Sorensen or something else.

There appear to be several standards which may be used in laboratories, to which sea water samples may be compared, and also for which working mathematical relationships between the practical salinity and measured variables are to be defined.

A purely chemical standard, a solution of KCl or NaCl has the great advantage of being reproducible but in many respects is distantly related to the complex nature of natural sea waters. The opposite approach is that embodied in the data of Cox et al (1967). Their standard was ocean water, diluted by low salinity ocean water (although in some small part also by distilled water for  $R_T$  calculations) for low salinity samples and using natural (Red Sea and English Channel) sea waters for high salinity samples. Data obtained in this way certainly applies to the real ocean, to a degree depending upon the representativeness of the samples used. The disadvantage is that standard may be hard to reproduce, particularly if the composition of some water is changing (vide Kremling, personal communication and Millero et al, (1976a) re the Baltic). A third alternative is to use as a standard, sea water from mid-oceans (where pollution and change might be expected to be minimal) evaporated, and diluted with distilled water. This is of course, as noted above, the method used as base for data of Brown and Allentoft, and by Millero's group in developing their equations of state. This standard should be more reproducible than that used by Cox et al (1967) while retaining the salt balance of natural ocean water. Reproducibility will have to be paid for by spatial and possibly temporal variations in the coefficients relating salinities to measured quantities. Some indication of these variations in sea water composition are given by Culkin and Cox (1966), Sagi (1969), Tsunogai et al (1968), Carpenter and Manella (1973), Brewer and Bradshaw (1975), Kremling and Millero (1975), Yerofeyev et al (1975), Sugiura (1967), and Connors and Kester (1974). The latter authors estimated that (1) conductivity can be related to salinity to no better than  $0.006\text{‰}$  in the open ocean and in river-diluted nearshore areas to  $0.007\text{‰}$  (Amazon) and  $0.054\text{‰}$  (Rio Grande), (2) chlorinity can be related to salinity no better than  $0.014\text{‰}$  in the open ocean, and in river-diluted nearshore areas to  $0.009\text{‰}$  (Amazon) and  $0.08\text{‰}$  (Rio Grande), (3) the C-Cl-S relationships are apt to break down completely in enclosed or semi-enclosed basins such as the Red Sea Brine pockets.

On the whole it seems that the working procedures for relating measured quantities to S (or other definition) should be similar to those now used. A standard open-ocean surface water of known isotopic and chemical composition



should be chosen. At a standard temperature, (IPTS-68 scale 15°C, 20°C, or 25°C) and atmospheric pressure the relative electroconductivity ( $R_{15}$ ,  $R_{20}$ ,  $R_{25}$ ) of the standard should be cross-checked to a standard chemical solution. The chlorinity should be measured. The salinity should be calculated. The relative/absolute density should be measured. To a stated accuracy these values should be marked on every ampoule of standard sea water. This will be an arduous task even more so than in the past. Substandard sea water for operational standardizations should be prepared from standard sea water diluted with distilled water of appropriate type or evaporated in an approved manner.

Practical calculations of salinity from electroconductivity measurements will, then, need a sea water standard, with conductivity, chlorinity and perhaps density/specific gravity specified. Substandards will be prepared from this sea water by dilution with distilled water or evaporation. Salinity may be calculated from temperature and electroconductivity measurements by formulations based on data of Brown and Allentoft or a suitable similar body of new data if experiments presently underway so indicate. The effects of pressure on electroconductivity may be calculated from data of the type in Bradshaw and Schleichers' report expanded to cover all temperature, conductivity and pressure combinations of practical importance. Static calibrations of in situ sondes will consist of comparison of water sample salinities and in situ temperatures with calculations from sonde measurements. Dynamic calibrations of (whole) in situ systems are necessary for each system change.

If changes are to be made in practical working definitions of specific gravity and salinity, as they have recently been in temperature the question arises of possible recalculation of data incorporating previous definitions. This will necessitate inverting previous calculations and recomputation by the new formulations. The alternative is to treat all data in the banks as having an accuracy only as great as some function of the difference between old and new formulations. These alternatives should be considered when new definitions have been agreed upon.

## PROCEDURES

In the near future a number of decisions will be necessary, subject one hopes to the principles outlined earlier. These decisions include:

- (a) The form of salinity definitions falling out of probable adoption of a new equation of state for sea water,
- (b) Salinity standards stressing error limits and reproducibility.
- (c) Delineation of ranges of parameters of sea water of general interest, with special cases of possibly less general interest.
- (d) Assemblage of adequate body of standard basic data for sea water which embodies earlier decisions and gives interrelationships between sea water parameters.
- (e) Uniform procedures for calculating salinities from electroconductivity of sea water stressing universality, convenience, and error limits.
- (f) Procedures for updating material in archives.



# REFERENCES

- Bein, W., H. G. Hirsekorn and L. Moller, 1935. Konstantenbestimmungen des Meerwassers und Ergebnisse Uber Wasserkorper. Veroffentl. Inst. Meeresk., Univ. Berlin, N.F.S.A., Geog.-Naturwiss., H. 28: 1-240.
- Bennett, A. S., 1976. Conversion of in situ measurements of conductivity to salinity. Deep-sea Res., 23, 2, 157-165.
- Bonnot, J-F., 1971. Howaldt Bathysonde: Uses, operation and calibration procedures. The International Hydrographic Review, XLVIII, 1, 156-195.
- Bradshaw, A., and K. E. Schleicher, 1965. The effect of pressure on the electrical conductance of sea water. Deep-sea Res., 12, 151-162.
- Bradshaw, A., and K. E. Schleicher, 1970. Direct measurement of thermal expansion under pressure. Deep-Sea Res., 17, 691-706.
- Brewer, P. G. and A. Bradshaw, 1975. The effect of non-ideal composition of sea water on salinity and density. Journal of Mar. Res., 33, 2, 157-175.
- Bromley, L. A., V. A. DeSaussure, J. C. Clipp, and J. A. Wright, 1967. Heat capacities of sea water solutions at salinities of 1 to 12‰ and temperatures of 2° to 80°C. Journal Chem. Eng. Data, 12, 202-206.
- Bromley, L. A., A. E. Diamond, E. Salami, and D. G. Wilkins, 1970. Heat capacities and enthalpies on sea salt solutions to 200°C. Journal Chem. Eng. Data, 15, 246-253.
- Brown, N. L., and B. Allentoft, 1966. Salinity, conductivity, and temperature relation of sea water over the range 0 to 50‰. Final report, March 1, 1966, prepared for U.S. Office of Naval Research Contract N0nr4290(00) M.J.O., No. 2003 Bissett-Burman.
- Caldwell, D. R., and B. E. Tucker, 1970. Determination of thermal expansion of sea water by observing onset of convection. Deep-Sea Res., 17, 707-719.
- Carpenter, J. H. 1966. New measurements of oxygen solubility in pure and natural water. Limn. Oceanogr., 11, 264-277.
- Carpenter, J. H., and M. E. Manella, 1973. Magnesium to chlorinity ratios in sea water. Jour. Geophys. Res., 78, 18, 3621-3626.
- Carritt, D. E., 1963. Chemical instrumentation. pp 109-123 in The Sea, Vol. 2, Interscience, New York, pp 554.
- Castelli, V. J., E. N. Stanley, and E. C. Fischer, 1974. The thermal conductivity of sea water as a function of pressure and temperature. Deep-Sea Res., 21, 311-319.
- Chen, C. T. and F. J. Millero, 1975. The specific volume of seawater at high pressures. Deep-Sea Res., submitted.

- Comité International des Poids et Mesures, 1969. The International Practical Temperature Scale of 1968, *Metrologica*, 5, No. 6: 35-44.
- Connors, D. N. and D. R. Kester, 1974. Effect of major ion variations in the marine environment on the specific gravity-conductivity-chlorinity-salinity relationship. *Mar. Chem.*, 2, 301-314.
- Cox, R. A., 1963. The salinity problem. *Progress in Oceanography*, 1, M. Sears, Ed., the McMillan Co., New York, New York, pp 383, 243-261.
- Cox, R. A. and N. D. Smith, 1959. The specific heat of sea water. *Proc. Royal Soc., London, Series A, Math and Phys. Science*, 252, 51-62.
- Cox, R. A., F. Culkin, and J. P. Reilly, 1967. The electrical conductivity/chlorinity relationship in natural sea water. *Deep-Sea Res.*, 14, 203-220.
- Cox, R. A., M. J. McCartney, and F. Culkin, 1970. The specific gravity/salinity/temperature relationship in natural sea water. *Deep-Sea Res.*, 17, 679-689.
- Culkin, F., and R. A. Cox, 1966. Sodium, potassium, magnesium, calcium and strontium in sea water. *Deep-Sea Res.*, 13, 789-804.
- Del Grosso, V. A., 1974. New equation for the speed of sound in natural waters. *Jour. Acoust. Soc. Am.*, 56, 1084-1091.
- Dittmar, W., 1884. Report on researches into the composition of ocean water collected by H.M.S. Challenger. *Challenger Reps. Physics and Chem.*, 1, 1-251.
- Doherty, B. T. and D. R. Kester, 1974. Freezing point of sea water. *Journal of Marine Research*, 32, 2, 285-300.
- Douglas, E., 1964. Solubilities of oxygen, argon and nitrogen in distilled water. *Jour. Phys. Chem.*, 68, 169-174.
- Douglas, E., 1965. Solubilities of argon and nitrogen in sea water. *Jour. Phys. Chem.*, 69, 2608-2610.
- Ekman, V. W., 1908. Die Zusammendruckbarkeit des Meerwassers. *Cons. Perm. Int. Explor. Mer. Publ. Circonstance*, 43, 1-47.
- Emmet, R. T. and F. J. Millero, 1974. High pressure density measurements of sea water - preliminary results. *J. Geophys. Res.*, 79, 3463-3472.
- Emmet, R. T. and F. J. Millero, 1975. Densities of oceanographic standard waters. *J. Mar. Res.*, to be submitted.
- Fedorov, N. K., V. I. Prokhorov, 1972. True response lag in temperature measurement and the reliability of ocean salinities determined with temperature-salinity probes. *Atmospheric and Oceanic Physics*, Vol. 8, No. 9, 1972, pp 998-1003.
- Fine, R. A., D-P. Wang and F. G. Millero, 1974. The equation of state of sea water. *Journal of Mar. Res.*, 32, 3, 433-456.

- Fleming, R. H. and R. R. Revelle, 1939. Physical processes in the ocean. pp 48-141 in Recent Marine Sediments, P. D. Trask, Ed., Am. Soc. Petrol. Geol., Tulsa, Oklahoma, pp 736.
- Fofonoff, N. P. 1962. Physical properties of sea water. Ch. 1, pp 3-30 in Vol. 1, The Sea, M. N. Hill, Ed., Interscience, N. Y., pp 864.
- Fofonoff, N. P., S. P. Hayes, and R. C. Millard, Jr., 1974. WHOI/Brown CTD Microprofiler: Methods of calibration and data handling. Unpublished report WHOI-74-89, Woods Hole Oceanographic Inst., Woods Hole, Mass., pp 64.
- Fofonoff, N. P. and H. Bryden, 1975. Specific gravity and density of sea water at atmospheric pressure. Journal of Marine Res., 33, Supplement, 69-82.
- Forch, C., M. Knudsen and S. P. Sorensen, 1902. Reports on the determination of the constants for compilation of hydrographic tables. D. Kgl. Danske Vidensk., Selsk., Skifter, 6 Raekke Naturridensk. og Mathem., Copenhagen, Vol. 12, No. 1, pp 151.
- Fujino, K., E. L. Lewis, and R. G. Perkin, 1974. The freezing point of sea water at pressures up to 100 bars. Journal of Geophysical Res., 79, 12, 1792-1797.
- Goldberg, E. D., 1975. "Introduction" to the nature of sea water. Research Report 1, Physical and Chem. Sciences., Report on Dahlem Workshop, Berlin, March 10-15, 1975, Dahlem Konferenzen, Berlin, pp 719.
- Goulet, J. R. and B. J. Culverhouse, Jr., 1972. STD thermometer time constant. Journal of Geophys. Res., 77, 24, 4588-4589.
- Grasshoff, K. 1976. On the problem of future replacement of Knudsen-Ekman's equation of state of sea water. Jour. Phys. Oceanog., 6, 406-407.
- Greenberg, D. A., 1972. Comparisons of salinity formulae used in Canada. Unpublished manuscript, Can. Ocean. Data Centre, Dept. of Environment, Canada, pp 25.
- Guntz, A. A. and J. Kocher, 1952. "Mesure de la salinite des eaux de mer. Compte Rendu Acad. Sci., Paris, 23, 2300-2302.
- Horne, R. A., 1969. Marine Chemistry: The structure of water and the chemistry of the hydrosphere. Wiley-Interscience, New York, pp 568.
- Jacobsen, J. P. and M. Knudsen, 1940. Urnormal 1937 or primary standard sea water 1937. Assoc. Oceanogr. Physique, Publ. Sci., No. 7, Liverpool, 38pp.
- Janz, G. J. and S. K. Singer, 1975. Copenhagen standard sea water: Conductivity and salinity. Jour. Solu. Chem. 4, 12, 995-1003.
- Knudsen, M. (Ed.), 1901. Hydrographical Tables according to the measurings of Carl Forch, P. Jacobsen, Martin Knudsen and S.P.L. Sorensen. G.E.C. Gad., Copenhagen, Williams Norgate, pp 63.
- Korson, L., W. Drost-Hansen and F. J. Millero, 1969. Viscosity of water at various temperatures. Jour. Phys. Chem., 73, 34-39.



- Kozlovskaya, I. A., V. I. Koltunov, and B. K. Filanovskiy. 1974. Measurements of the absolute values of electrical conductivity in water samples of different salinity. *Oceanology*, 14, 6, 905-908 (English Ed.).
- Kremling, K., 1972. Comparison of specific gravity in natural sea water from hydrographical tables and measurements by a new density instrument. *Deep-Sea Res.*, 19, 377-383.
- Kremling, K. F., and F. J. Millero, 1975. The densities of Baltic sea waters. Unpublished, presented at AGU fall Annual Meeting, San Francisco, Dec. 8-12, 1975.
- Kroebel, W. and K.-H. Mahrt, 1975. Recent results of absolute sound velocity measurements in pure water and sea water at atmospheric pressure. Unpublished note.
- Kuwahara, S., 1939. Velocity of sound in sea water and calculation of the velocity for use in sonic sounding. *Hydrogr. Rev.*, 16, 123-140.
- Lepple, F. K. and F. J. Millero, 1971. The isothermal compressibility of sea water near one atmosphere. *Deep-Sea Res.*, 18, 1233-1254.
- Leroy, C.C., 1969. Development of simple equations for accurate and more realistic calculations of the speed of sound in sea water. *Journal Acoustical Soc. Am.*, 46, No. 1, part II, 216-226.
- Lewis, E. L., and R. B. Sudar, 1972. Measurement of conductivity and temperature in the sea for salinity determination. *Jour. Geophys. Res.*, 77, 33, 6611-6617.
- Lyman, J., 1959. Chemical considerations. pp 87-97 in *Physical and Chemical Properties of Sea Water*, Nat. Acad. Sci., N.R.C. Publ. 600, Washington, pp 202.
- Lyman, J. and R. H. Fleming, 1940. Composition of seawater. *J. Mar. Res.*, 3, 134-146.
- Millero, F. J., 1967a. High precision magnetic float densimeter. *Rev. Sci. Instr.*, 38, 1441-1444.
- Millero, F. J., 1967b. Apparent molal volumes of sodium fluoride in aqueous solutions at 25°C. *J. Phys. Chem.*, 71: 4567-4569.
- Millero, F. J., 1973a. Theoretical estimates of the isothermal compressibility of seawater. *Deep-Sea Res.*, 20, 101-105.
- Millero, F. J., 1973b. Seawater - a test of multicomponent electrolyte solution theories, I. The apparent equivalent volume, expansibility and compressibility of artificial seawater. *J. Soln. Chem.*, 2, 1-22.
- Millero, F. J., 1974a. Seawater as a multicomponent electrolyte solution, Chapter 1, pp 3-80 in: *The Sea*, Vol. 5, E. D. Goldberg, Editor. John Wiley & Sons, New York, pp 894.
- Millero, F. J., 1974b. The physical chemistry of seawater. *Ann. Rev. Earth Planet. Sci.*, 2, 101-105.

- Millero, F. J., 1974c. The physical chemistry and structure of seawater. in Structure of Water and Aqueous Solutions. W. Luck, Editor. Verlag Chemie, Weinheim, Bergstr. Germany, 513-522.
- Millero, F. J., 1975a. Thermodynamics of seawater, Chapter 4. in: The Oceans Handbook. R. A. Horne, Editor. Marcel Dekker, New York, in press.
- Millero, F. J., 1975b. The physical chemistry of natural waters, Chapter 15. in: Water Quality: J. S. Mattson and H. Marks, Ed. Marcel Dekker, New York, in press.
- Millero, F. J., 1975c. The equation of state of Lake Tanganyika. Earth Planet Sci. Letters, in press.
- Millero, F. J., 1975d. The physical chemistry of estuaries. in: Marine Chemistry of the Coastal Environment. T. Church, Ed., ACS Adv. Chem. Ser., Washington, D.C., in press.
- Millero, F. J., R. A. Fine, C. T. Chen, A. Gonzalez and C. K. Ward, 1975. The equation of state of seawater. Office of Naval Research Technical Report, in preparation.
- Millero, F. J., A. Gonzalez and G. K. Ward, 1976b. The density of sea water Solutions at one atmosphere as a function of temperature and salinity. Jour. Mar. Res., 34, 1, 61-93.
- Millero, F. J. and T. Kubinski, 1975. The speed of sound in seawater as a function of temperature and salinity at one atmosphere. J. Acoust. Soc. Am., 57, 312-319.
- Millero, F. J., D. Lawson, and A. Gonzalez, 1976a. The density of artificial river and estuary waters. Journal of Geophysical Res., 81, 6, 1177-1179.
- Millero, F. J. and F. K. Lepple, 1973. The density and expansibility of artificial seawater solutions from 0 to 40°C and 0 to 21‰ chlorinity. Mar. Chem., 1, 89-104.
- Millero, F. J., G. Perron, and J. E. Desnoyers, 1973. Heat capacity of sea water solutions from 5° to 35°C and from 0.5 to 22‰ of chlorinity. Journal of Geophysical Research, 78, 21, 4499-4507.
- Montgomery, R. B., 1959. Water characteristics of Atlantic Ocean and world oceans. Deep-Sea Res., 5, 134-148.
- Morris, A. W. and J. P. Riley, 1964. The direct gravimetric determination of salinity of sea water. Deep-Sea Res., 11, pp 899-904.
- Morris, A. W. and J. P. Riley, 1966. The bromide/chlorinity and sulphate/chlorinity ratio in sea water. Deep-Sea Res., 13, 4, 699-705.
- Murray, C. N., J. P. Riley, 1969. The solubility of gases in distilled water and sea water - II. Oxygen. Deep-Sea Res., 16, 311-320.
- Murray, C. N., J. P. Riley, and T.R.S. Wilson, 1969. The solubility of gases in distilled water and sea water. Deep-Sea Res., 16, 297-310.

- Park, K. 1964. Reliability of standard sea water as a conductivity standard. *Deep-Sea Res.*, 11, 85-87.
- Reeburgh, W. S., 1965. Measurements of electrical conductivity of seawater. *Jour. Marine Res.*, V23, No. 6, 187-199.
- Ribe, R. L. and J. G. Howe, 1975. An empirical equation relating sea water salinity, temperature, pressure and electrical conductivity. *Mar. Tech. Soc. Jour.*, 9, 9, 3-13.
- Riley, J. P. and G. Skirrow, 1975. *Chemical Oceanography*. 2nd ed., Vol. 1, Academic Press, London, pp 606.
- Robinson, R. A., 1954. Vapour pressure and osmotic equivalence of sea water. *Jour. Mar. Biol. Assoc., U.K.* 33, 449-455.
- Roden, G. I. and J. D. Irish, 1975. Electronic digitization and sensor response effects on salinity computation from CTD field measurements. *Jour. of Physical Oceanography*, 5, 195-199.
- Rusby, J.S.M., 1967. Measurements of refractive index of sea water relative to Copenhagen Standard Sea Water. *Deep-Sea Res.*, 14, 427-439.
- Sager, G., 1974. Zur refraction von Licht im Meerwasser. *Beitr. Meeresk.*, 33, 63-72.
- Sagi, T., 1969. The concentration of calcium and the calcium chlorosity ratio in the western North Pacific. *Oceanographic Mag.*, 21, 1, 61-66.
- Selifonova, E. P., A. P. Tsurikova, M. P. Nesterova, 1973. Research on some physiochemical characteristics of Soviet Normal Water. *Chemistry of Seas and Oceans*, Science, Moscow.
- Stanley, E. M., 1971. The refractive index of seawater as a function of temperature, pressure and two wavelengths. *Deep-Sea Res.*, 18, 833-840.
- Stoughton, R. W. and M. H. Lietzke, 1967. Thermodynamic properties of sea water. *Jour. Chem. & Eng. Data*, 12, 101-104.
- Sugiura, Y., 1967. The significance of the difference in conductometric chlorinity minus titrimetric chlorinity. *Records of Oceanographic Works in Japan*, 9, 1, 55-64.
- Thomas, B. D., T. G. Thompson, and C. L. Utterback, 1934. The electrical conductivity of sea water. *Journal of Cons. Int. Explor., Mer.*, 9, 28-35.
- Thompson, T. G. and W. E. Wirth, 1931. The specific gravity of seawater at zero degrees in relation to chlorinity. *J. of Cons. Int. Explor., Mer.*, 6, 232-240.
- Tsunogai, S., M. Nishimura and S. Nakaya, 1968. Calcium and magnesium in sea water and the ratio of calcium to chlorinity as a tracer of water masses. *Jour. Ocean. Soc. Japan*, 24, 4, 153-159.



- Tsurikova, A. P., and V. L. Tsurikov, 1971. On the concept of salinity. *Oceanology*, 2, 282-286.
- UNESCO, 1971. International Oceanographic Tables. Vol. 1, Converting conductivity ratio to salinity of seawater. Nat. Inst. Oceanogr. of Great Britain and UNESCO, Paris, pp.128.
- UNESCO, 1973. International Oceanographic Tables. Vol. 2, Oxygen saturation of seawater and salinity/chlorosity. Nat. Inst. Oceanog. of Great Britain and UNESCO, Paris, pp.141.
- Walker, E. R., 1972. Response time of the Guideline 8101A. Unpublished manuscript, Canada. Dept. of Environment, Marine Sciences Directorate, Pacific Region, Victoria, B.C., pp.24.
- Walker, E. R. and K.D. Chapman, 1973. Salinity-conductivity formulae compared. Unpublished manuscript, Canada. Dept. of Environment, Marine Sciences Directorate, Pacific Region, Victoria, B.C. Pacific Marine Science Report 73-5. pp.52.
- Wallace, W. J., 1974. The development of the chlorinity/salinity concept in oceanography. Elsevier, Amsterdam, pp 227.
- Wang, D. P., and J. F. Millero, 1973. Precise representation of the PVT properties of water and sea water determined from sound speeds. *Journal of Geophysical Research*, 78, 30, 7123-7128.
- Weiss, R. F., 1970. The solubility of nitrogen, oxygen and argon in water and sea water. *Deep-Sea Res.*, 17, 721-735.
- Wenner, F., E. H. Smith and F. M. Soule, 1930. Apparatus for the determination aboard ship of the salinity of seawater by the electrical conductivity method. *U.S. Bur. Stand. Jour. Res.*, Washington, D.C., 5, 711-732.
- Wilson, T.R.S., 1975. Salinity and the major elements of seawater. pp 365-413, Vol. 1 in *Chemical Oceanography*. Riley, J. P. and G. Skirrow, Eds., Academic Press, London, pp 606.
- Wilson, W., 1960. Speed of sound in sea water as a function of temperature, pressure, and salinity. *Jour. Acoust. Soc., Am.*, 32, 641-644.
- Wilson, W. and D. Bradley, 1968. Specific volume of seawater as a function of temperature, pressure and salinity. *Deep-Sea Res.*, 15, 355-363.
- Yerofeyev, P. N., L. G. Ponomareva and A. N. Ramazin, 1975. Criteria for determining the salinity of sea water by electroconductivity with corrections for temperature and pressure effects. Summary Information, Series 9, "Professional Oceanology", No. 4, Central Scientific Res., Inst. of Information and Technico-Economic Res., Ministry of Fisheries, U.S.S.R., Moscow. pp 61.

## TABLES

1. (a) The abundances of the chemical elements found in sea water (after Horne 1969).  
  
(b) Concentrations of major ions in sea water (after Wilson 1975).
2. Definitions or estimates of salinity and relationships between them. "S" is 'dry residue' salinity,  $\Sigma$  is sum of major ions,  $g_T$  is 'total solids',  $S_L$  is 'total salinity'.
3. Values of the partial derivations around 35‰, 15°C, 0 db of the various parameters of sea water affected by salinity (after Riley and Skirrow (1975) Appendix).
4. Data bases for estimating sea water salinity from conductivity measurements (after Walker and Chapman (1973) in part).
5. Notes on empirical relationships giving salinity as a function of electrical conductivity, temperature and pressure.
6. UNESCO Table salinity values in parts per thousand minus those calculated from formulae, temperature 15°C (IPTS 1948), Pressure 0 db.
7. Brown-Allentoft average experimental salinity in parts per thousand minus those calculated from formulae temperature 15°C (IPTS 1948), pressure 0 db.
8. Brown-Allentoft salinity values minus values by BENNETT (1976) (a) 0 db (b) 1000 db (c) 2000 db (d) 5000 db.
9. Brown-Allentoft salinity values minus values by MILLERO et al (1976b). (a) 0 db (b) 1000 db (c) 2000 db (d) 5000 db.
10. Brown-Allentoft salinity values minus values by RIBE-HOWE (1975). (a) 0 db (b) 100 db (c) 2000 db (d) 5000 db.
11. Brown-Allentoft salinity values minus values by FOFONOFF et al (1974). (a) 0 db (b) 1000 db (c) 2000 db (d) 5000 db.
12. Brown-Allentoft salinity values minus values by SALINI (a) 0 db (b) 1000 db (c) 2000 db (d) 5000 db.
13. International Oceanographic Tables salinity values minus values by BENNETT (1976). (a) 0 db (b) 1000 db (c) 2000 db (d) 5000 db.
14. International Oceanographic Tables salinity values minus values by MILLERO et al (1976a). (a) 0 db (b) 1000 db (c) 2000 db (d) 5000 db.
15. International Oceanographic Tables salinity values minus values by RIBE-HOWE (1975). (a) 0 db (b) 1000 db (c) 2000 db (d) 5000 db.
16. International Oceanographic Tables salinity values minus values by FOFONOFF et al (1974). (a) 0 db (b) 1000 db (c) 2000 db (d) 5000 db.

17. International Oceanographic Tables salinity minus values by SALINI (a) 0 db  
(b) 1000 db (c) 2000 db (d) 5000 db.



TABLE 1(a) The abundances of the chemical elements found in sea water (after Horne 1969).

Element	Chemical Form	ppm	Element	Chemical Form	ppm
Ag	AgCl <sub>2</sub> <sup>-</sup>	0.0003	Mg	Mg <sup>2+</sup>	1350.
Al		0.01	Mn	Mn <sup>2+</sup>	0.002
Ar	Ar	0.6	Mo	MoO <sub>4</sub> <sup>2-</sup>	0.01
As	AsO <sub>4</sub> H <sup>2-</sup>	0.003	N	Organic N, NO <sub>3</sub> <sup>-</sup> , NH <sub>4</sub> <sup>+</sup>	0.5
Au	AuCl <sub>4</sub> <sup>-</sup>	0.000011	Na	Na <sup>+</sup>	10500
B	B(OH) <sub>3</sub>	4.6	Nb		0.00001
Ba	Ba <sup>++</sup>	0.03	Ne	Ne	0.00014
Be		0.0000006	Ni	Ni <sup>2+</sup>	0.0054
Bi		0.000017	O	OH <sub>2</sub> , O <sub>2</sub> , SO <sub>4</sub> <sup>2-</sup>	857000
Br	Br <sup>-</sup>	65	P	PO <sub>4</sub> H <sup>2-</sup>	0.07
C	CO <sub>3</sub> H <sup>-</sup> , organic C	28	Pa		2×10 <sup>-9</sup>
Ca	Ca <sup>2+</sup>	400	Pb	Pb <sup>2+</sup>	0.00003
Cd	Cd <sup>2+</sup>	0.00011	Ra		6×10 <sup>-11</sup>
Ce		0.0004	Rb	Rb <sup>+</sup>	0.12
Cl	Cl <sup>-</sup>	19000	Rn	Rn	6×10 <sup>-16</sup>
Co	Co <sup>2+</sup>	0.00027	S	SO <sub>4</sub> <sup>2-</sup>	885
Cr		0.00005	Sb		0.00033
Cs	Cs <sup>+</sup>	0.0005	Sc		<0.000004
Cu	Cu <sup>2+</sup>	0.003	Se		0.00009
F	F	1.3	Si	Si(OH) <sub>4</sub>	3
Fe	Fe(OH) <sub>3</sub>	0.01	Sn		0.003
Ga		0.00003	Sr	Sr <sup>9+</sup>	8.1
Ge	Ge(OH) <sub>4</sub>	0.00007	Ta		<0.0000025
H	H <sub>2</sub> O	108000	Th		0.00005
He	He	0.0000069	Ti		0.001
Hf		<0.000008	Tl	Tl <sup>+</sup>	<0.00001
Hg	HgCl <sub>4</sub> <sup>2-</sup>	0.00003	U	UO <sub>2</sub> (CO <sub>3</sub> ) <sub>3</sub> <sup>4-</sup>	0.003
I	I <sup>-</sup> IO <sub>3</sub> <sup>-</sup>	0.06	V	VO <sub>5</sub> H <sub>3</sub> <sup>2-</sup>	0.002
In		<0.02	W	WO <sub>4</sub> <sup>2-</sup>	0.0001
K	K <sup>+</sup>	380	Xe	Xe	0.000052
Kr	Kr	0.0025	Y		0.0003
La		0.000012	Zn	Zn <sup>2+</sup>	0.01
Li	Li <sup>+</sup>	0.18	Zr		0.000022

TABLE 1(b) Concentrations of Major ions in sea water (after Wilson 1975).

Ion	g kg <sup>-1</sup> at S = 35‰	g kg <sup>-1</sup> chlorinity ‰ <sup>-1</sup>
Cl <sub>2</sub> <sup>-</sup>	19.354	0.9989
SO <sub>4</sub>	2.712	0.1400
Br <sup>-</sup>	0.0673	0.00347
F <sup>-</sup>	0.0013	0.000067
B	0.0045	0.000232
Na <sup>+</sup>	10.77	0.5560
Mg <sup>2+</sup>	1.290	0.0665*
Ca <sup>2+</sup>	0.4121	0.02127
K <sup>+</sup>	0.399	0.0206
Sr <sup>2+</sup>	0.0079	0.00041

\* Recent reported values lie between 0.06612 and 0.06692

TABLE 2

Definitions or estimates of salinity and relationships between them. "S" is 'dry residue' salinity,  $\Sigma\%$  is sum of major ions,  $g_T$  is 'total solids',  $S_L$  is 'total salinity'.

A. $S = 0.030 + 1.805 \text{ Cl } (‰)$	Forch et al (1902)
B. $S = 1.80655 \text{ Cl } (‰) = -0.08996$ $+28.29720 R_{15} + 12.80832 (R_{15})^2$ $-10.67869 (R_{15})^3 + 5.98624 (R_{15})^4$ $-1.32311 (R_{15})^5$	Cox et al (1967)
C. $\Sigma‰ = 0.073 + 1.8110 \text{ Cl } (‰)$ $= 0.069 + 1.8112 \text{ Cl } (‰)$	Lyman + Fleming (1940) Lyman (1958)
D. $g_T = 1.81578 \text{ Cl } (‰)$	Millero et al (1974a)
E. $S_L = 0.043 + 1.0044 S (‰)$	Fofonoff (1966, p. 6) attributed to Lyman and Fleming (1940).

TABLE 3

Values of the partial derivations around 35‰, 15°C, 0 db of the various parameters of sea water affected by salinity (after Riley and Skirrow (1975) Appendix)

Parameter	Units	$\frac{\partial}{\partial S} (\text{‰})^{-1}$	$\frac{\partial}{\partial T} (\text{°C})^{-1}$	$\frac{\partial}{\partial P} (\text{db})^{-1}$	Remarks
Solubility oxygen	cm <sup>3</sup> dm <sup>-3</sup>	-.04	-.1	--	Table-6 (UNESCO 73)
Solubility Nitrogen	cm <sup>3</sup> dm <sup>-3</sup>	-.07	-.2	--	Table-7 (Weiss (1970), Murray & Riley (1969))
Solubility Argon	cm <sup>3</sup> dm <sup>-3</sup>	-.002	-.006	--	T-8 (Weiss (1970) Douglas (1964,65))
Expansibility	$\alpha \times 10^6 (\text{deg}^{-1})$	2.0	9	--	T-11 (Millero, Lepple (1973)).
Isothermal Compressibility	$\beta \times 10^{-6} (\text{bar}^{-1})$	-.17	-.14	—	T-12 (Lepple, Millero (1971))
Thermal Expansion	$(10^{-6} \text{ cm}^3 (\text{°C})^{-1})$	1.3	9	0.1	T-16 (Bradshaw, Schleicher 1970)
Sound Velocity	(m sec <sup>-1</sup> )	1.2	3.2	.02	T-17, T-17b (U. S.N.H.O.)
Specific Heat	(J gm <sup>-1</sup> (°C) <sup>-1</sup> )	-.005	.0008	--	T-18 (Millero et al 1973)
Thermal Conductivity	$(10^{-5} \text{ W cm day}^{-1})$	-.3	1.6	.04	T-20 (Castelli et al 1974)
Freezing Point	(°C)	-.06	--	-.0008	T-21 (Doherty, Kester 1974)
Surface Tension	(N M <sup>-2</sup> )	.02	-.1		T-24 (Fleming Revelle (1939))
Viscosity	(cp)	.002	-.03	$-1.8 \times 10^{-4}$	T-25 (Korson et al '69 Millero '74).
Refractive Index	$(n-1.3) 10^5$	18	-9	1.4	T-35 (Stanley '71)
Electrical Conductance	(mmho cm <sup>-1</sup> )	1.1	1	$3 \times 10^{-4}$	Cox et al 1967 T-28 (Bradshaw Schleicher 1965)
Velocity of Light	(km sec <sup>-1</sup> )	-31	15	—	T-36 (Sager 1974)
Specific Gravity		.0008	.0002	.000005	T-14 Cox (1965) T-13 Cox et al '70



TABLE 4

Data bases for estimating sea water salinity from conductivity measurements (after Walker and Chapman (1973) in part).

<u>Data</u>		
Thomas et al (1934)	$0^{\circ} \leq T \leq 20^{\circ} \text{C}$ , $10 \leq S \leq 35^{\circ}/_{\text{oo}}$ , $T = 25^{\circ}$ , $3 \leq S \leq 39^{\circ}/_{\text{oo}}$	$P = 0$ $P = 0$
Reeburgh (1965)	$-1 \leq T \leq 35$ , $28 \leq S \leq 40^{\circ}/_{\text{oo}}$	$P = 0$
Cox et al (1967)	$T = 15^{\circ}$ , $25 \leq S \leq 41^{\circ}/_{\text{oo}}$ $14 \leq T \leq 29^{\circ}$ , $4 \leq S \leq 42^{\circ}/_{\text{oo}}$	$P = 0$ $P = 0$
Brown and Allentoft (1966)	$0 \leq T \leq 30^{\circ}$ , $2 \leq S \leq 40^{\circ}/_{\text{oo}}$ ; $T = 15^{\circ}$ , $0 \leq S \leq 60^{\circ}/_{\text{oo}}$ ; $0 \leq T \leq 35^{\circ}$ , $S = 35^{\circ}/_{\text{oo}}$	$P = 0$ $P = 0$
Bradshaw and Schleicher (1965)	$T = 0, 5, 10, 15, 20, 25^{\circ}$ $S = 31, 35, 39^{\circ}/_{\text{oo}}$	$P = 0 - 10,338 \text{ db}$
Dauphinee (unpublished)	$-2 \leq T \leq 30^{\circ}$ , $30 \leq S \leq 35^{\circ}/_{\text{oo}}$	$P = 0$
Janz and Singer (1975)	$12 \leq T \leq 40^{\circ} \text{C}$ , $S = 35^{\circ}/_{\text{oo}}$	$P = 0$
Millero et al (1976b)	$0.5 \leq S \leq 40^{\circ}/_{\text{oo}}$ , $T = 15^{\circ} \text{C}$	$P = 0$

TABLE 5

Notes on empirical relationships giving salinity as a function of electrical conductivity, temperature and pressure.

Bennett (1976)

Fit to data of Cox et al (1967),  $3 \leq S \leq 43\text{‰}$ ,  $14 \leq T \leq 29^\circ\text{C}$ , factor  $R_T$  from Brown and Allentoft (1966), and Dauphinee,  $S = 35\text{‰}$ ,  $-2 \leq T \leq 30^\circ\text{C}$ . Pressure effects limited fit to Bradshaw and Schleicher (1965),  $31 \leq S \leq 39\text{‰}$ ,  $0 \leq T \leq 20^\circ\text{C}$ ,  $0 < p < \text{variable}$ . IPTS-68 used. Estimated accuracy  $0.0042\text{‰}$  r.m.s. with possible systematic error of  $0.01\text{‰}$ .

Millero et al (1976)

Fit to own experimental data, standard sea water, evaporated or diluted with distilled water, salinity determined gravimetrically. Range of data uncertain. No pressure dependence.

Ribe-Howe (1975)

Fit to data of Cox et al (1967), Brown and Allentoft (1966) and Bradshaw and Schleicher. Accuracy claimed  $\pm 0.007\text{‰}$  for  $20 \leq S \leq 40\text{‰}$ ,  $0 \leq T \leq 30^\circ\text{C}$ ,  $0 \leq p \leq 7000\text{db}$ . IPTS-48 used.

Fofonoff et al (1974)

Exact usage of equations from International Oceanographic Tables, Brown and Allentoft, Bradshaw and Schleicher (1965). Total error estimates not given.

SALINI (T. Sankey, IOS, Wormley, 1974)

Data from Bradshaw, Schleicher, Brown and Allentoft, International Oceanographic Tables. Valid over  $30 \leq S \leq 40\text{‰}$ ,  $0 \leq T \leq 30^\circ\text{C}$ ,  $0 \leq p \leq 6000\text{db}$ . Based on  $T_{48}$  but  $T_{68}$  to  $T_{48}$  conversion included.

TABLE 6

R15	UNESCO SALINITY	BENNETT	MILLERO	RIBE-HOWE	FOFONOFF	SALINI
0.0	-0.090	-0.000	-0.090	0.176	-0.000	-0.000
0.05	1.356	-0.000	-0.052	0.094	-0.000	-0.000
0.10	2.858	-0.000	-0.034	0.039	-0.000	-0.000
0.15	4.410	-0.000	-0.029	0.004	-0.000	-0.000
0.20	6.006	-0.000	-0.030	-0.016	-0.000	-0.000
0.25	7.640	-0.000	-0.033	-0.024	-0.000	-0.000
0.30	9.309	-0.000	-0.036	-0.025	-0.000	-0.000
0.35	11.008	-0.000	-0.038	-0.022	-0.000	-0.000
0.40	12.735	-0.000	-0.037	-0.017	-0.000	-0.000
0.45	14.485	-0.000	-0.034	-0.012	-0.000	-0.000
0.50	16.259	-0.000	-0.029	-0.007	-0.000	-0.000
0.55	18.053	-0.000	-0.023	-0.004	-0.000	-0.000
0.60	19.866	-0.000	-0.018	-0.003	-0.000	-0.000
0.65	21.697	0.000	-0.012	-0.002	-0.000	-0.000
0.70	23.546	-0.000	-0.008	-0.002	-0.001	-0.000
0.75	25.413	0.000	-0.005	-0.001	-0.001	0.000
0.80	27.296	-0.000	-0.003	-0.001	-0.001	-0.000
0.85	29.196	-0.000	-0.003	-0.001	-0.001	-0.000
0.90	31.114	0.000	-0.002	-0.001	-0.001	0.000
0.95	33.048	0.000	-0.002	-0.001	-0.001	0.000
1.00	35.000	0.000	-0.001	-0.001	-0.001	-0.000
1.05	36.969	0.000	0.001	-0.000	-0.001	-0.000
1.10	38.955	0.000	0.005	0.000	-0.001	0.000
1.15	40.959	0.000	0.010	0.001	-0.001	0.000
1.20	42.979	0.000	0.015	0.001	-0.001	-0.000
1.25	45.015	0.000	0.018	0.000	-0.001	0.000
1.30	47.066	0.000	0.015	-0.002	-0.001	0.000
1.35	49.131	0.000	0.001	-0.008	-0.001	0.000
1.40	51.209	0.000	-0.030	-0.019	-0.001	0.000
1.45	53.297	0.000	-0.090	-0.036	-0.001	0.000

UNESCO TABLE SALINITY VALUES IN PARTS PER THOUSAND MINUS THOSE CALCULATED

FROM FORMULAE

TEMPERATURE = 15.0 (DEGREES CELSIUS) (T48)

PRESSURE = 0.0 (DECIBARS)



TABLE 7

R15	B. - A. SALINITY	BENNETT	MILLERO	RIBE-HOWE	FOFONOFF	SALINI
0.0	0.0	0.090	0.0	0.266	0.090	0.090
0.05	1.383	0.027	-0.024	0.122	0.027	0.027
0.10	2.878	0.021	-0.014	0.059	0.020	0.021
0.15	4.436	0.026	-0.003	0.030	0.026	0.026
0.20	6.038	0.033	0.003	0.017	0.032	0.033
0.25	7.678	0.037	0.004	0.013	0.037	0.037
0.30	9.348	0.039	0.003	0.013	0.039	0.039
0.35	11.046	0.038	0.000	0.015	0.037	0.038
0.40	12.769	0.035	-0.002	0.017	0.035	0.035
0.45	14.517	0.031	-0.002	0.019	0.031	0.031
0.50	16.285	0.026	-0.002	0.019	0.026	0.026
0.55	18.075	0.022	-0.001	0.018	0.022	0.022
0.60	19.885	0.019	0.001	0.016	0.018	0.019
0.65	21.712	0.015	0.003	0.013	0.015	0.015
0.70	23.556	0.010	0.002	0.008	0.010	0.010
0.75	25.421	0.008	0.003	0.007	0.008	0.008
0.80	27.303	0.007	0.003	0.005	0.006	0.007
0.85	29.202	0.005	0.003	0.004	0.005	0.005
0.90	31.118	0.004	0.001	0.003	0.003	0.004
0.95	33.050	0.002	0.000	0.001	0.001	0.002
1.00	35.000	0.000	-0.001	-0.001	-0.001	-0.000
1.05	36.967	-0.002	-0.001	-0.003	-0.003	-0.003
1.10	38.950	-0.005	-0.000	-0.005	-0.006	-0.005
1.15	40.950	-0.008	0.002	-0.007	-0.009	-0.008
1.20	42.967	-0.011	0.004	-0.010	-0.012	-0.011
1.25	45.003	-0.012	0.006	-0.012	-0.013	-0.012
1.30	47.054	-0.012	0.003	-0.014	-0.013	-0.012
1.35	49.123	-0.008	-0.007	-0.017	-0.009	-0.008
1.40	51.209	0.001	-0.030	-0.018	-0.001	0.001
1.45	53.313	0.017	-0.073	-0.020	0.015	0.017

BROWN AND ALLENTOFT AVERAGE EXPERIMENTAL SALINITY IN PARTS PER THOUSAND  
 MINUS THOSE FROM FORMULAE  
 TEMPERATURE = 15.0 (DEGREES CELSIUS) (T48)  
 PRESSURE = 0.0 (DECIBARS)

TABLE 8(a)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)	DEGREES CELSIUS									
	30.	0.019	0.024	0.039	0.031	0.017	0.007	0.005	0.002	-0.003
	25.	0.020	0.026	0.041	0.032	0.020	0.009	0.004	0.002	-0.003
	20.	0.021	0.026	0.040	0.032	0.020	0.010	0.004	0.001	-0.004
	15.	0.021	0.025	0.039	0.029	0.018	0.008	0.004	0.000	-0.007
	10.	0.021	0.025	0.037	0.029	0.018	0.011	0.007	0.002	-0.007
	5.	0.021	0.025	0.036	0.029	0.018	0.010	0.007	-0.001	-0.009
	0.	0.021	0.026	0.040	0.031	0.022	0.016	0.011	0.004	0.000
	-1.	0.022	0.027	0.042	0.035	0.026	0.023	0.017	0.013	0.011
	-2.	0.022	0.028	0.046	0.039	0.033	0.032	0.026	0.024	0.022

BROWN-ALLENTOFF AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY BENNETT  
PRESSURE IS 0.0 DECIBARS

TABLE 8(b)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.469	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)	DEGREES CELSIUS									
	30.	0.019	0.025	0.040	0.033	0.020	0.011	0.010	0.009	0.007
	25.	0.021	0.027	0.042	0.033	0.021	0.010	0.005	0.004	0.002
	20.	0.022	0.028	0.042	0.033	0.021	0.010	0.005	0.003	-0.000
	15.	0.022	0.028	0.041	0.031	0.019	0.009	0.006	0.002	-0.003
	10.	0.023	0.027	0.039	0.031	0.019	0.012	0.008	0.004	-0.002
	5.	0.022	0.027	0.037	0.029	0.017	0.009	0.007	0.001	-0.003
	0.	0.022	0.026	0.038	0.027	0.016	0.011	0.007	0.004	0.006
	-1.	0.022	0.027	0.040	0.030	0.020	0.016	0.013	0.011	0.016
	-2.	0.022	0.027	0.043	0.033	0.025	0.024	0.020	0.022	0.030

BROWN-ALLENTOFF AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY BENNETT  
PRESSURE IS 1000.0 DECIBARS

TABLE 8(c)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48) DEGREES CELSIUS										
30.	0.020	0.027	0.042	0.034	0.022	0.013	0.014	0.014	0.014	
25.	0.022	0.028	0.044	0.035	0.022	0.011	0.006	0.005	0.004	
20.	0.023	0.030	0.045	0.036	0.023	0.011	0.005	0.003	0.001	
15.	0.024	0.030	0.045	0.034	0.021	0.011	0.007	0.003	-0.002	
10.	0.025	0.030	0.043	0.034	0.021	0.013	0.009	0.005	0.000	
5.	0.024	0.029	0.040	0.031	0.018	0.009	0.007	0.001	-0.000	
0.	0.023	0.028	0.039	0.026	0.014	0.008	0.005	0.003	0.009	
-1.	0.023	0.028	0.040	0.028	0.017	0.013	0.010	0.010	0.019	
-2.	0.024	0.029	0.043	0.031	0.022	0.020	0.017	0.021	0.033	

BROWN-ALLENTOFF AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY BENNETT  
PRESSURE IS 2000.0 DECIBARS

TABLE 8(d)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (49) DEGREES CELSIUS										
30.	0.022	0.031	0.047	0.039	0.026	0.016	0.016	0.017	0.019	
25.	0.026	0.035	0.053	0.042	0.027	0.013	0.005	0.002	-0.001	
20.	0.029	0.039	0.058	0.047	0.031	0.016	0.005	-0.001	-0.007	
15.	0.030	0.042	0.061	0.050	0.033	0.018	0.008	-0.000	-0.010	
10.	0.032	0.043	0.062	0.052	0.035	0.022	0.012	0.003	-0.007	
5.	0.032	0.043	0.059	0.049	0.031	0.017	0.009	-0.001	-0.005	
0.	0.031	0.041	0.056	0.042	0.025	0.013	0.006	0.001	0.007	
-1.	0.031	0.041	0.057	0.042	0.027	0.018	0.011	0.009	0.019	
-2.	0.031	0.041	0.059	0.044	0.031	0.025	0.017	0.020	0.034	

BROWN-ALLENTOFF AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY BENNETT  
PRESSURE IS 5000.0 DECIBARS



TABLE 9(a)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)	DEGREES CELSIUS									
	30.	-0.023	-0.002	0.004	-0.001	-0.001	-0.001	0.001	0.001	0.003
	25.	-0.023	-0.004	0.003	-0.003	-0.001	-0.001	-0.002	-0.001	0.003
	20.	-0.023	-0.004	0.002	-0.002	0.001	0.002	0.001	0.001	0.005
	15.	-0.022	-0.004	0.002	-0.002	0.001	0.003	0.002	-0.001	0.001
	10.	-0.021	-0.002	0.004	0.004	0.007	0.009	0.006	-0.000	-0.001
	5.	-0.019	0.002	0.011	0.013	0.017	0.017	0.012	0.001	0.000
	0.	-0.016	0.008	0.022	0.023	0.027	0.025	0.014	-0.001	-0.001
	-1.	-0.015	0.009	0.025	0.026	0.029	0.029	0.015	0.000	0.001
	-2.	-0.015	0.010	0.028	0.028	0.032	0.031	0.015	0.000	0.001

BROWN-ALLENTONFT AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
 MINUS THE SALINITY VALUES CALCULATED BY MILLERO ET AL.  
 PRESSURE IS 0.0 DECIBARS

TABLE 9(b)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)	DEGREES CELSIUS									
30.	-0.023	-0.002	0.004	-0.001	-0.001	-0.000	0.002	0.001	0.003	
25.	-0.023	-0.004	0.003	-0.003	-0.001	-0.001	-0.002	-0.001	0.003	
20.	-0.023	-0.004	0.002	-0.001	0.001	0.003	0.001	0.001	0.006	
15.	-0.022	-0.004	0.002	-0.002	0.002	0.004	0.002	-0.001	0.001	
10.	-0.021	-0.002	0.004	0.004	0.007	0.010	0.006	-0.000	-0.000	
5.	-0.018	0.002	0.011	0.014	0.017	0.018	0.013	0.001	0.001	
0.	-0.016	0.007	0.022	0.024	0.027	0.026	0.015	-0.001	0.000	
-1.	-0.015	0.008	0.025	0.027	0.030	0.030	0.016	0.000	0.002	
-2.	-0.014	0.009	0.028	0.029	0.033	0.032	0.015	0.000	0.002	

BROWN-ALLENTONFT AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
 MINUS THE SALINITY VALUES CALCULATED BY MILLERO ET AL.  
 PRESSURE IS 1000.0 DECIBARS

TABLE 9(c)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES CELSIUS										
30.	-0.023	-0.002	0.004	-0.001	-0.001	-0.000	0.002	0.001	0.004	
25.	-0.023	-0.004	0.003	-0.002	-0.001	-0.000	-0.001	-0.001	0.003	
20.	-0.023	-0.004	0.002	-0.001	0.002	0.003	0.001	0.001	0.006	
15.	-0.022	-0.004	0.002	-0.001	0.002	0.004	0.003	-0.001	0.002	
10.	-0.020	-0.003	0.004	0.005	0.007	0.011	0.007	-0.000	0.000	
5.	-0.018	0.002	0.011	0.015	0.018	0.018	0.013	0.001	0.002	
0.	-0.015	0.007	0.022	0.025	0.028	0.027	0.015	-0.001	0.001	
-1.	-0.015	0.008	0.025	0.027	0.031	0.031	0.016	0.000	0.002	
-2.	-0.014	0.009	0.028	0.030	0.033	0.033	0.016	0.000	0.003	

BROWN-ALLENTOF AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY MILLERO ET AL.  
PRESSURE IS 2000.0 DECIBARS

TABLE 9(d)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES CELSIUS										
30.	-0.023	-0.003	0.004	0.000	-0.000	0.001	0.002	0.001	0.004	
25.	-0.023	-0.004	0.002	-0.002	-0.000	0.000	-0.001	-0.001	0.004	
20.	-0.022	-0.004	0.001	-0.000	0.002	0.004	0.002	0.001	0.007	
15.	-0.021	-0.005	0.001	-0.000	0.003	0.005	0.004	-0.001	0.003	
10.	-0.020	-0.003	0.004	0.006	0.009	0.012	0.008	-0.000	0.002	
5.	-0.017	0.001	0.011	0.016	0.019	0.020	0.015	0.001	0.004	
0.	-0.014	0.006	0.022	0.026	0.029	0.029	0.017	-0.001	0.003	
-1.	-0.014	0.007	0.025	0.029	0.032	0.033	0.018	0.000	0.005	
-2.	-0.013	0.008	0.028	0.032	0.035	0.035	0.018	0.000	0.005	

BROWN-ALLENTOF AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY MILLERO ET AL.  
PRESSURE IS 5000.0 DECIBARS

TABLE 10(a)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES	CELSIUS									
30.	-0.122	-0.127	-0.059	-0.010	0.001	-0.002	0.001	0.001	0.001	-0.003
25.	-0.046	-0.069	-0.030	0.003	0.009	0.002	-0.000	-0.001	-0.001	-0.005
20.	0.027	-0.013	-0.005	0.015	0.015	0.007	0.003	0.001	-0.003	-0.003
15.	0.092	0.034	0.014	0.020	0.016	0.007	0.003	-0.001	-0.007	-0.007
10.	0.137	0.065	0.022	0.021	0.016	0.009	0.005	-0.000	-0.008	-0.008
5.	0.141	0.062	0.009	0.011	0.010	0.008	0.008	0.001	-0.006	-0.006
0.	0.068	-0.008	-0.046	-0.029	-0.013	-0.002	0.003	-0.001	-0.006	-0.006
-1.	0.040	-0.034	-0.065	-0.042	-0.020	-0.004	0.002	0.000	-0.004	-0.004
-2.	0.005	-0.066	-0.087	-0.058	-0.030	-0.007	-0.001	0.000	-0.004	-0.004

BROWN-ALLENTOF AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY RIBE - HOWE  
PRESSURE IS 0.0 DECIBARS

TABLE 10(b)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES	CELSIUS									
	30.	-0.132	-0.134	-0.061	-0.008	0.004	0.003	0.008	0.009	0.005
	25.	-0.058	-0.078	-0.035	0.002	0.009	0.003	0.001	0.000	-0.003
	20.	0.013	-0.025	-0.011	0.012	0.014	0.006	0.002	0.001	-0.003
	15.	0.075	0.021	0.007	0.016	0.014	0.006	0.002	-0.002	-0.008
	10.	0.118	0.049	0.014	0.017	0.014	0.008	0.004	-0.002	-0.009
	5.	0.119	0.044	-0.000	0.006	0.008	0.006	0.006	-0.001	-0.008
	0.	0.043	-0.029	-0.057	-0.035	-0.017	-0.005	-0.000	-0.005	-0.010
	-1.	0.013	-0.056	-0.077	-0.049	-0.025	-0.007	-0.002	-0.004	-0.009
	-2.	-0.024	-0.089	-0.100	-0.064	-0.034	-0.011	-0.005	-0.005	-0.009

BROWN-ALLENTOF AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY RIBE - HOWE  
PRESSURE IS 1000.0 DECIBARS



TABLE 10(c)

TEMPERATURE (48) DEGREES CELSIUS	SALINITIES (0/00)								
	1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
30.	-0.143	-0.142	-0.064	-0.007	0.008	0.008	0.014	0.016	0.013
25.	-0.070	-0.088	-0.039	0.000	0.009	0.004	0.003	0.003	-0.001
20.	-0.002	-0.036	-0.017	0.009	0.013	0.006	0.003	0.001	-0.003
15.	0.058	0.007	-0.001	0.013	0.013	0.005	0.002	-0.002	-0.008
10.	0.098	0.034	0.005	0.014	0.012	0.008	0.004	-0.001	-0.009
5.	0.096	0.026	-0.009	0.002	0.006	0.006	0.006	-0.001	-0.008
0.	0.014	-0.051	-0.069	-0.040	-0.019	-0.005	-0.001	-0.005	-0.010
-1.	-0.017	-0.079	-0.089	-0.054	-0.027	-0.008	-0.002	-0.004	-0.009
-2.	-0.055	-0.113	-0.112	-0.070	-0.037	-0.012	-0.005	-0.005	-0.009

BROWN-ALLENTOFT AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY RIBE - HOWE  
PRESSURE IS 2000.0 DECIBARS

TABLE 10(d)

TEMPERATURE (48) DEGREES CELSIUS	SALINITIES (0/00)								
	1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
30.	-0.173	-0.165	-0.073	-0.008	0.013	0.017	0.025	0.029	0.028
25.	-0.106	-0.116	-0.054	-0.005	0.008	0.006	0.006	0.006	0.004
20.	-0.045	-0.070	-0.035	0.001	0.010	0.006	0.003	0.002	-0.002
15.	0.006	-0.034	-0.022	0.003	0.009	0.005	0.003	-0.001	-0.006
10.	0.037	-0.015	-0.020	0.003	0.009	0.008	0.006	0.001	-0.006
5.	0.023	-0.031	-0.039	-0.010	0.003	0.007	0.010	0.004	-0.003
0.	-0.077	-0.123	-0.105	-0.055	-0.022	-0.001	0.007	0.003	-0.001
-1.	-0.114	-0.155	-0.127	-0.068	-0.029	-0.003	0.006	0.005	0.002
-2.	-0.158	-0.194	-0.153	-0.085	-0.038	-0.005	0.005	0.007	0.004

BROWN-ALLENTOFT AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY RIBE - HOWE  
PRESSURE IS 5000.0 DECIBARS

TABLE 11(a)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)	DEGREES CELSIUS									
	30.	0.020	0.027	0.041	0.030	0.015	0.004	0.003	0.001	-0.006
	25.	0.020	0.025	0.039	0.028	0.015	0.003	-0.000	-0.001	-0.006
	20.	0.020	0.026	0.038	0.029	0.017	0.007	0.003	0.001	-0.004
	15.	0.021	0.025	0.038	0.029	0.017	0.008	0.004	-0.001	-0.008
	10.	0.022	0.027	0.041	0.034	0.022	0.014	0.007	-0.000	-0.010
	5.	0.025	0.031	0.048	0.044	0.032	0.022	0.014	0.001	-0.009
	0.	0.027	0.037	0.059	0.054	0.043	0.030	0.016	-0.001	-0.010
	-1.	0.028	0.038	0.062	0.057	0.045	0.034	0.017	0.000	-0.008
	-2.	0.029	0.039	0.065	0.059	0.048	0.036	0.016	0.000	-0.008

BROWN-ALLENTOFF AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY FOFONOFF  
PRESSURE IS 0.0 DECIBARS

TABLE 11(b)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (43)	DEGREES CELSIUS									
	30.	0.020	0.027	0.041	0.030	0.015	0.004	0.003	0.001	-0.006
	25.	0.020	0.025	0.039	0.028	0.015	0.003	-0.000	-0.001	-0.006
	20.	0.020	0.026	0.038	0.029	0.017	0.007	0.003	0.001	-0.004
	15.	0.021	0.025	0.038	0.029	0.017	0.008	0.004	-0.001	-0.008
	10.	0.022	0.027	0.041	0.034	0.022	0.014	0.007	-0.000	-0.010
	5.	0.025	0.031	0.048	0.044	0.032	0.022	0.014	0.001	-0.009
	0.	0.027	0.037	0.059	0.054	0.043	0.030	0.016	-0.001	-0.010
	-1.	0.028	0.038	0.062	0.057	0.045	0.034	0.017	0.000	-0.009
	-2.	0.029	0.039	0.065	0.059	0.048	0.036	0.016	0.000	-0.009

BROWN-ALLENTOFF AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY FOFONOFF  
PRESSURE IS 1000.0 DECIBARS

TABLE 11(c)

TEMPERATURE(48) DEGREES CELSIUS	SALINITIES (0/00)								
	1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
30.	0.020	0.027	0.041	0.030	0.015	0.004	0.003	0.001	-0.006
25.	0.020	0.025	0.039	0.028	0.015	0.003	-0.000	-0.001	-0.006
20.	0.020	0.026	0.038	0.029	0.017	0.007	0.003	0.001	-0.004
15.	0.021	0.025	0.038	0.029	0.017	0.008	0.004	-0.001	-0.008
10.	0.022	0.027	0.041	0.034	0.022	0.014	0.007	-0.000	-0.010
5.	0.025	0.031	0.048	0.044	0.032	0.022	0.014	0.001	-0.009
0.	0.027	0.037	0.059	0.054	0.043	0.030	0.016	-0.001	-0.010
-1.	0.028	0.038	0.062	0.057	0.046	0.034	0.017	0.000	-0.009
-2.	0.029	0.039	0.065	0.059	0.048	0.036	0.016	0.000	-0.009

BROWN-ALLENTCFT AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY FOFONOFF  
PRESSURE IS 2000.0 DECIBARS

TABLE 11(d)

TEMPERATURE(48) DEGREES CELSIUS	SALINITIES (0/00)								
	1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
30.	0.020	0.027	0.041	0.030	0.015	0.004	0.003	0.001	-0.006
25.	0.020	0.025	0.039	0.028	0.015	0.003	-0.000	-0.001	-0.006
20.	0.020	0.026	0.039	0.029	0.017	0.007	0.003	0.001	-0.004
15.	0.021	0.025	0.039	0.029	0.017	0.008	0.004	-0.001	-0.008
10.	0.023	0.027	0.041	0.035	0.023	0.014	0.007	-0.000	-0.010
5.	0.025	0.031	0.048	0.044	0.033	0.022	0.014	0.001	-0.009
0.	0.027	0.037	0.059	0.054	0.043	0.030	0.016	-0.001	-0.010
-1.	0.028	0.038	0.062	0.057	0.046	0.034	0.017	0.000	-0.009
-2.	0.029	0.039	0.065	0.059	0.048	0.037	0.017	0.000	-0.009

BROWN-ALLENTCFT AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY FOFONOFF  
PRESSURE IS 5000.0 DECIBARS



TABLE 12(a)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES	CELSIUS									
30.		0.016	0.021	0.037	0.030	0.018	0.008	0.005	0.000	-0.007
25.		0.018	0.023	0.039	0.031	0.020	0.008	0.002	-0.001	-0.007
20.		0.020	0.025	0.040	0.033	0.021	0.011	0.005	0.002	-0.003
15.		0.021	0.025	0.039	0.029	0.018	0.008	0.004	-0.000	-0.007
10.		0.022	0.026	0.037	0.028	0.016	0.009	0.005	0.000	-0.008
5.		0.023	0.027	0.036	0.028	0.016	0.009	0.007	0.000	-0.006
0.		0.024	0.028	0.038	0.026	0.015	0.010	0.006	0.000	-0.003
-1.		0.024	0.028	0.039	0.026	0.016	0.012	0.007	0.002	-0.000
-2.		0.024	0.028	0.040	0.026	0.017	0.014	0.007	0.003	0.002

BROWN-ALLENTOFT AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY SALINI  
PRESSURE IS 0.0 DECIBARS

TABLE 12(b)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)	DEGREES CELSIUS									
30.		0.016	0.021	0.037	0.030	0.018	0.008	0.005	0.000	-0.007
25.		0.018	0.023	0.039	0.031	0.020	0.008	0.002	-0.001	-0.007
20.		0.020	0.025	0.040	0.033	0.021	0.011	0.005	0.002	-0.003
15.		0.021	0.025	0.039	0.029	0.018	0.008	0.004	-0.000	-0.007
10.		0.022	0.026	0.037	0.028	0.016	0.009	0.005	0.000	-0.008
5.		0.023	0.027	0.036	0.028	0.016	0.009	0.007	0.000	-0.006
0.		0.024	0.028	0.038	0.026	0.015	0.010	0.006	-0.000	-0.003
-1.		0.024	0.028	0.039	0.026	0.016	0.012	0.007	0.002	-0.000
-2.		0.024	0.028	0.040	0.026	0.016	0.013	0.007	0.003	0.002

BROWN-ALLENTOFT AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY SALINI  
PRESSURE IS 1000.0 DECIBARS

TABLE 12(c)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48) DEGREES CELSIUS										
30.	0.016	0.021	0.037	0.030	0.018	0.008	0.005	0.000	-0.007	
25.	0.018	0.023	0.039	0.031	0.020	0.008	0.002	-0.001	-0.007	
20.	0.020	0.025	0.040	0.033	0.021	0.011	0.005	0.002	-0.003	
15.	0.021	0.025	0.039	0.029	0.018	0.008	0.004	-0.000	-0.007	
10.	0.022	0.026	0.037	0.028	0.016	0.009	0.005	0.000	-0.008	
5.	0.023	0.027	0.036	0.028	0.016	0.009	0.007	0.000	-0.006	
0.	0.024	0.028	0.037	0.026	0.015	0.010	0.006	-0.000	-0.003	
-1.	0.024	0.028	0.038	0.026	0.016	0.012	0.007	0.002	0.000	
-2.	0.024	0.028	0.040	0.026	0.016	0.013	0.006	0.003	0.002	

BROWN-ALLENTOFT AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY SALINI  
PRESSURE IS 2000.0 DECIBARS

TABLE 12(d)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48) DEGREES CELSIUS										
30.		0.016	0.021	0.037	0.030	0.018	0.008	0.005	0.000	-0.007
25.		0.018	0.023	0.039	0.031	0.020	0.008	0.002	-0.001	-0.007
20.		0.020	0.025	0.040	0.032	0.021	0.011	0.005	0.002	-0.003
15.		0.021	0.025	0.039	0.029	0.017	0.008	0.004	-0.000	-0.007
10.		0.022	0.026	0.036	0.028	0.015	0.008	0.005	0.000	-0.008
5.		0.023	0.027	0.036	0.028	0.015	0.008	0.007	0.000	-0.005
0.		0.024	0.028	0.037	0.025	0.014	0.009	0.005	-0.000	-0.002
-1.		0.024	0.028	0.038	0.025	0.015	0.011	0.006	0.002	0.002
-2.		0.024	0.028	0.039	0.025	0.015	0.012	0.006	0.003	0.004

BROWN-ALLENTOFT AVERAGE EXPERIMENTAL SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY SALINI  
PRESSURE IS 5000.0 DECIBARS

TABLE 13(a)

	SALINITIES (0/00)								
	1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48) DEGREES CELSIUS									
30.	-0.002	-0.003	-0.002	0.001	0.003	0.004	0.002	0.002	0.004
25.	-0.000	0.000	0.001	0.003	0.005	0.004	0.003	0.002	0.002
20.	0.000	0.001	0.002	0.003	0.004	0.002	0.002	0.001	0.001
15.	-0.000	-0.000	-0.000	-0.000	0.000	-0.000	0.000	0.000	-0.000
10.	-0.001	-0.002	-0.004	-0.005	-0.005	-0.003	-0.001	0.002	0.003

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY BENNETT  
PRESSURE IS 0.0 DECIBARS

TABLE 13(b)

	SALINITIES (0/00)								
	1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48) DEGREES CELSIUS									
30.	-0.001	-0.002	-0.000	0.003	0.005	0.007	0.007	0.009	0.014
25.	0.001	0.001	0.003	0.005	0.006	0.005	0.005	0.004	0.007
20.	0.001	0.003	0.004	0.005	0.005	0.003	0.003	0.003	0.005
15.	0.001	0.002	0.003	0.002	0.002	0.001	0.002	0.002	0.004
10.	0.000	0.000	-0.002	-0.003	-0.004	-0.003	0.001	0.004	0.008

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY BENNETT  
PRESSURE IS 1000.0 DECIBARS



TABLE 13(c)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES CELSIUS										
30.	-0.000	-0.000	0.001	0.005	0.007	0.010	0.011	0.014	0.021	
25.	0.002	0.003	0.005	0.006	0.007	0.006	0.005	0.005	0.009	
20.	0.003	0.005	0.007	0.007	0.007	0.004	0.004	0.003	0.006	
15.	0.003	0.005	0.006	0.005	0.004	0.003	0.002	0.003	0.006	
10.	0.002	0.003	0.002	-0.000	-0.001	-0.001	0.002	0.005	0.010	

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY BENNETT  
PRESSURE IS 2000.0 DECIBARS

TABLE 13(d)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES CELSIUS										
30.	0.002	0.004	0.006	0.010	0.011	0.013	0.013	0.017	0.026	
25.	0.006	0.009	0.013	0.014	0.012	0.009	0.005	0.002	0.004	
20.	0.008	0.014	0.020	0.019	0.015	0.008	0.004	-0.001	-0.003	
15.	0.010	0.016	0.022	0.020	0.016	0.010	0.004	-0.000	-0.003	
10.	0.010	0.016	0.021	0.017	0.013	0.008	0.005	0.003	0.003	

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY BENNETT  
PRESSURE IS 5000.0 DECIBARS

TABLE 14(a)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES	CELSIUS									
	30.	-0.043	-0.029	-0.037	-0.030	-0.016	-0.004	-0.001	0.001	0.010
	25.	-0.043	-0.029	-0.037	-0.031	-0.016	-0.005	-0.003	-0.001	0.008
	20.	-0.043	-0.029	-0.036	-0.030	-0.015	-0.005	-0.001	0.001	0.010
	15.	-0.043	-0.029	-0.037	-0.031	-0.016	-0.005	-0.002	-0.001	0.008
	10.	-0.043	-0.029	-0.037	-0.031	-0.016	-0.005	-0.002	-0.000	0.009

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY MILLERO ET AL.  
PRESSURE IS 0.0 DECIBARS

TABLE 14(b)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (49)	DEGREES CELSIUS									
	30.	-0.043	-0.029	-0.037	-0.030	-0.015	-0.004	-0.001	0.001	0.010
	25.	-0.043	-0.029	-0.037	-0.031	-0.016	-0.005	-0.002	-0.001	0.008
	20.	-0.043	-0.029	-0.036	-0.030	-0.015	-0.004	-0.000	0.001	0.011
	15.	-0.043	-0.029	-0.037	-0.031	-0.016	-0.005	-0.002	-0.001	0.008
	10.	-0.043	-0.029	-0.037	-0.030	-0.015	-0.004	-0.001	-0.000	0.010

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY MILLERO ET AL.  
PRESSURE IS 1000.0 DECIBARS

TABLE 14(c)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES CELSIUS										
30.		-0.043	-0.029	-0.037	-0.030	-0.015	-0.004	-0.001	0.001	0.011
25.		-0.043	-0.029	-0.037	-0.031	-0.015	-0.005	-0.002	-0.001	0.009
20.		-0.043	-0.029	-0.036	-0.029	-0.015	-0.004	-0.000	0.001	0.011
15.		-0.043	-0.030	-0.037	-0.030	-0.015	-0.004	-0.001	-0.001	0.009
10.		-0.042	-0.030	-0.037	-0.030	-0.015	-0.004	-0.001	-0.000	0.010

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY MILLERO ET AL.  
PRESSURE IS 2000.0 DECIBARS

TABLE 14(d)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES CELSIUS										
30.		-0.043	-0.030	-0.037	-0.029	-0.015	-0.003	-0.000	0.001	0.011
25.		-0.043	-0.030	-0.037	-0.030	-0.015	-0.004	-0.001	-0.001	0.009
20.		-0.042	-0.030	-0.036	-0.029	-0.014	-0.003	0.001	0.001	0.012
15.		-0.042	-0.030	-0.037	-0.029	-0.015	-0.003	-0.001	-0.001	0.010
10.		-0.042	-0.030	-0.037	-0.029	-0.014	-0.002	0.000	-0.000	0.012

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY MILLERO ET AL.  
PRESSURE IS 5000.0 DECIBARS



TABLE 15(a)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES	CELSIUS									
30.		-0.142	-0.154	-0.099	-0.039	-0.014	-0.005	-0.001	0.001	0.004
25.		-0.066	-0.094	-0.069	-0.025	-0.006	-0.003	-0.001	-0.001	0.000
20.		0.006	-0.039	-0.043	-0.013	-0.001	-0.000	0.001	0.001	0.002
15.		0.070	0.008	-0.025	-0.009	-0.001	-0.002	-0.001	-0.001	0.000
10.		0.113	0.037	-0.019	-0.013	-0.007	-0.005	-0.002	-0.000	0.002

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
 MINUS THE SALINITY VALUES CALCULATED BY RIBE - HOWE  
 PRESSURE IS 0.0 DECIBARS

TABLE 15(b)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES CELSIUS										
30.		-0.152	-0.161	-0.101	-0.037	-0.010	-0.000	0.005	0.009	0.012
25.		-0.079	-0.104	-0.074	-0.027	-0.006	-0.002	0.000	0.000	0.002
20.		-0.008	-0.050	-0.049	-0.016	-0.002	-0.001	0.001	0.001	0.002
15.		0.053	-0.005	-0.032	-0.013	-0.003	-0.003	-0.002	-0.002	-0.001
10.		0.094	0.022	-0.027	-0.017	-0.009	-0.006	-0.003	-0.002	0.001

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
 MINUS THE SALINITY VALUES CALCULATED BY RIBE - HOWE  
 PRESSURE IS 1000.0 DECIBARS

TABLE 15(c)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES	CELSIUS									
30.		-0.163	-0.169	-0.104	-0.036	-0.007	0.005	0.011	0.016	0.020
25.		-0.091	-0.114	-0.078	-0.028	-0.006	-0.000	0.002	0.003	0.004
20.		-0.023	-0.062	-0.055	-0.019	-0.003	-0.001	0.001	0.001	0.002
15.		0.036	-0.019	-0.039	-0.016	-0.005	-0.003	-0.002	-0.002	-0.000
10.		0.074	0.006	-0.036	-0.021	-0.010	-0.007	-0.003	-0.001	0.001

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY RIBE - HOWE  
PRESSURE IS 2000.0 DECIBARS

TABLE 15(d)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)	DEGREES CELSIUS									
	30.	-0.193	-0.192	-0.113	-0.036	-0.002	0.014	0.023	0.029	0.035
	25.	-0.127	-0.142	-0.093	-0.034	-0.007	0.001	0.005	0.006	0.009
	20.	-0.066	-0.096	-0.073	-0.027	-0.007	-0.002	0.002	0.002	0.003
	15.	-0.015	-0.060	-0.061	-0.026	-0.009	-0.004	-0.001	-0.001	0.001
	10.	0.014	-0.042	-0.061	-0.032	-0.014	-0.006	-0.001	0.001	0.004

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY RIBE - HOWE  
PRESSURE IS 5000.0 DECIBARS

TABLE 16(a)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES	CELSIUS									
	30.	-0.000	-0.000	0.000	0.001	0.000	0.000	0.000	0.001	0.001
	25.	-0.000	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001	-0.001	-0.001
	20.	-0.000	0.000	0.001	0.001	0.001	-0.000	0.001	0.001	0.001
	15.	-0.000	-0.000	-0.000	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001
	10.	0.000	0.000	-0.000	-0.000	-0.000	-0.000	0.000	-0.000	-0.000

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
 MINUS THE SALINITY VALUES CALCULATED BY FOFOJOFF  
 PRESSURE IS 0.0 DECIBARS

TABLE 16(b)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)	DEGREES CELSIUS									
	30.	-0.000	-0.000	0.000	0.001	0.000	0.001	0.000	0.001	0.001
	25.	-0.000	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001	-0.001	-0.001
	20.	-0.000	0.000	0.001	0.001	0.001	-0.000	0.001	0.001	0.001
	15.	-0.000	-0.000	-0.000	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001
	10.	0.000	0.000	-0.000	-0.000	-0.000	-0.000	0.000	-0.000	-0.000

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
 MINUS THE SALINITY VALUES CALCULATED BY FOFOJOFF  
 PRESSURE IS 1000.0 DECIBARS



TABLE 16(c)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES CELSIUS										
30.	-0.000	-0.000	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001
25.	-0.000	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001	-0.001	-0.001	-0.001
20.	-0.000	0.000	0.001	0.001	0.001	-0.000	0.001	0.001	0.001	0.001
15.	-0.000	-0.000	-0.000	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001	-0.001
10.	0.000	0.000	-0.000	-0.000	-0.000	-0.000	0.000	-0.000	-0.000	-0.000

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY FOFONOFF  
PRESSURE IS 2000.0 DECIBARS

TABLE 16(d)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES CELSIUS										
30.	-0.000	-0.000	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001
25.	-0.000	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001	-0.001	-0.001	-0.001
20.	-0.000	0.000	0.001	0.001	0.001	-0.000	0.001	0.001	0.001	0.001
15.	-0.000	-0.000	-0.000	-0.000	-0.000	-0.001	-0.000	-0.001	-0.001	-0.001
10.	0.000	0.000	-0.000	-0.000	-0.000	-0.000	0.000	-0.000	-0.000	-0.000

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY FOFONOFF  
PRESSURE IS 5000.0 DECIBARS

TABLE 17(a)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES	CELSIUS									
	30.	-0.004	-0.006	-0.004	0.001	0.004	0.004	0.002	0.000	0.000
	25.	-0.002	-0.002	-0.000	0.003	0.005	0.004	0.001	-0.001	-0.002
	20.	-0.000	-0.000	0.002	0.004	0.005	0.003	0.003	0.002	0.001
	15.	-0.000	-0.000	-0.000	-0.000	0.000	-0.000	0.000	-0.000	-0.000
	10.	-0.000	-0.001	-0.004	-0.007	-0.007	-0.005	-0.002	0.000	0.001

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
 MINUS THE SALINITY VALUES CALCULATED BY SALINI  
 PRESSURE IS 0.0 DECIBARS

TABLE 17(b)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES	CELSIUS									
	30.	-0.004	-0.006	-0.004	0.001	0.004	0.004	0.002	0.000	0.000
	25.	-0.002	-0.002	-0.000	0.003	0.005	0.004	0.002	-0.001	-0.002
	20.	-0.000	-0.000	0.002	0.004	0.005	0.003	0.003	0.002	0.001
	15.	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	-0.000	-0.000
	10.	-0.000	-0.001	-0.004	-0.007	-0.007	-0.005	-0.002	0.000	0.001

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
 MINUS THE SALINITY VALUES CALCULATED BY SALINI  
 PRESSURE IS 1000.0 DECIBARS

TABLE 17(c)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES	CELSIUS									
30.		-0.004	-0.006	-0.004	0.001	0.004	0.004	0.002	0.000	0.000
25.		-0.002	-0.002	-0.000	0.003	0.005	0.004	0.001	-0.001	-0.002
20.		-0.000	-0.000	0.002	0.004	0.005	0.003	0.003	0.002	0.001
15.		-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	0.000	-0.000	0.000
10.		-0.000	-0.001	-0.005	-0.007	-0.007	-0.005	-0.002	0.000	0.002

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY SALINI  
PRESSURE IS 2000.0 DECIBARS

TABLE 17(d)

		SALINITIES (0/00)								
		1.927	4.163	9.858	15.468	20.300	25.332	30.200	35.000	40.196
TEMPERATURE (48)										
DEGREES	CELSIUS									
30.		-0.004	-0.006	-0.004	0.001	0.003	0.004	0.002	0.000	0.000
25.		-0.002	-0.002	-0.000	0.003	0.005	0.003	0.001	-0.001	-0.002
20.		-0.001	-0.000	0.002	0.004	0.005	0.003	0.003	0.002	0.002
15.		-0.000	-0.000	-0.000	-0.000	-0.000	-0.001	-0.000	-0.000	0.001
10.		-0.000	-0.001	-0.005	-0.007	-0.007	-0.006	-0.003	0.000	0.002

INTERNATIONAL OCEANOGRAPHIC TABLE SALINITY VALUES IN PARTS PER THOUSAND  
MINUS THE SALINITY VALUES CALCULATED BY SALINI  
PRESSURE IS 5000.0 DECIBARS



DOUBLE PRECISION FUNCTION BENN2 (T,P,R)  
 IMPLICIT REAL\*8 (A-H,O-Z)

R = C(S,T,P)/C(35,15,0)  
 TEMPERATURE IS T(68)

TSQ = T\*T  
 TFT = TSQ\*TSQ  
 PSQ = P\*P

F = 1.60836D-5\*P - 5.4845D-10\*PSQ + 6.166D-15\*PSQ\*P  
 F = F/(1.D0 + 3.0786D-2\*T + 3.169D-4\*TSQ)  
 RT = 0.676518D0 + 0.200402D-1\*T + 0.122700D-3\*TSQ  
 1 - 0.218091D-5\*TSQ\*T + 0.663405D-7\*TFT - 0.95646D-9\*TFT\*T  
 RST = R/(1.D0 + F)  
 R = RST/RT  
 RSQ = R\*R  
 RFT = RSQ\*RSQ

BENN2 = -0.08996D0 + 28.8567D0\*R + 12.13832D0\*RSQ  
 1 - 10.61869D0\*RSQ\*R + 5.98624D0\*RFT - 1.32311D0\*RFT\*R  
 2 + R\*(R - 1.D0)\*(0.442D-1\*T - 0.46D-3\*TSQ - 4.D-3\*R\*T  
 3 + (1.25D-4 - 2.9D-6\*T)\*P )

T = TSAVE  
 RETURN  
 END

DOUBLE PRECISION FUNCTION MILL (T,R)  
 IMPLICIT REAL\*8 (A-H,O-Z)

EQUATION DUE TO MILLERO ET AL., 1976

NO PRESSURE DEPENDENCE

R = R(S,T,0)

TSQ = T\*T  
 TFT = TSQ\*TSQ  
 RBAT = 0.67652453D0 + 0.20131661D-1\*T + 0.99886585D-4\*TSQ  
 1 - 0.19426015D-6\*TSQ\*T - 0.67249142D-8\*TFT

RT = R/RBAT  
 R15 = RT + 1.D-5\*RT\*(RT - 1.D0)\*(T - 15.D0)\*(9.67D1 - 7.2D1\*RT  
 1 + 3.73D1\*RT\*RT - (0.63D0 + 0.21D0\*RT\*RT)\*(T - 15.D0))  
 R15SQ = R15\*R15  
 R15FT = R15SQ\*R15SQ

SALINITY CALCULATION

MILL = 2.725861D1\*R15 + 1.906186D1\*R15SQ - 2.723835D1\*R15SQ\*R15  
 1 + 2.709961D1\*R15FT - 1.419791D1\*R15FT\*R15  
 2 + 3.01619D0\*R15FT\*R15SQ

RETURN  
 END

DOUBLE PRECISION FUNCTION RH2 (T,P,R)

RETURNS A SALINITY VALUE GIVEN:

PRESSURE 'P' IN DBARS

TEMPERATURE 'T' IN DEGREES CELSIUS (T48)

R = R(S,T,P)

FORMULA DUE TO RIBE AND HOWE

IMPLICIT REAL\*8 (A-H,O-Z)

```

RC=6.765245D-1+T*(2.013166D-2+T*(9.988659D-5+T
R  *(-1.942602D-7-T*6.724914D-9)))
R1=(P*(1.8993D-6-P*5.71D-11))*(1.00+4.498D-4*
R  DEXP(2.6515D3/(T+2.73165D2)))
G=-1.7483D-2+T*(-5.0058D-4+T*(-2.453D-6+T*1.005D-8))
D=7.31D-1+2.8D-3*T
A=3.389D0+T*(-2.99D-2+T*(-1.162D-3+T*2.5D-5))
H=-3.67D-5+T*(-9.683D-7+T*(-2.973D-8+T*3.59D-10))
RH2 =3.5D1-(R-R0*(1.00+R1))/G/(1.00+D*R1)
RH2 =RH2 +(1.00+R1*A)*H*(3.5D1-RH2 )**2/G
IF (RH2.LT.20.00) RH2 = RH2 + 1.1D-6*(T + 20.0)*(23.00 - RH2)**3
RETURN
END

```

```

      DOUBLE PRECISION FUNCTION FOF (T,P,R)
      IMPLICIT REAL*8 (A-L,O-Z)
      C*****
      C
      C      FUNCTIONS FOR THE CALCULATION OF RP = C(T,S,P)/C(T,S,0)
      C
      G(T) = 1.5192D0 - 4.5302D-2*T + 8.3089D-4*T*T - 7.9D-6*T*T*T
      F(P) = 1.042D-3*P - 3.3913D-8*P*P + 3.3D-13*P*P*P
      H(P) = 4.D-4 + 2.577D-5*P - 2.492D-9*P*P
      J(T) = 1.D0 - 1.535D-1*T + 8.276D-3*T*T - 1.657D-4*T*T*T
      L(T) = 6.95D-3 - 7.6D-5*T
      RPF(S,T,P) = 1.D0 + 1.D-2*(G(T)*F(P) + H(P)*J(T))*
      1      (1.D0 + L(T)*(35.D0 - S))
      C
      C      FUNCTION FOR THE CALCULATION OF RT = C(T,35,0)/C(15,35,0)
      C
      RTF(T) = 0.67652453D0 + 0.20131661D-1*T + 0.99886585D-4*T*T
      1      - 0.19426015D-6*T*T*T - 0.67249142D-8*T*T*T*T
      C
      C      FUNCTION FOR THE CALCULATION OF R15 = C(15,S,0)/C(15,35,0)
      C      WHERE RS = C(T,S,0)/C(T,35,0)
      C
      R15F(RS,T) = RS + 1.D-5*(RS*(RS - 1.D0)*(T - 15.D0))*
      1      (96.7D0 - 72.D0*RS + 37.3D0*RS*RS
      2      - (0.63D0 + 0.21D0*RS*RS)*(T - 15.D0))
      C*****
      C      T TEMPERATURE CELSIUS (T48)
      C      P PRESSURE (DBAR)
      C      R C(S,T,P)/C(35,15,0)
      C
      C      ITERATIVE PROCEDURE: WHEN CHANGE IN SALINITY IS LESS THAN TOLER
      C      PARTS PER THOUSAND THEN TERMINATE THE PROCEDURE.
      C      USE 35.0 AS THE INITIAL SALINITY.
      C
      SOLD = 35.D0
      TOLER = 0.001D0
      C
      10 RP = RPF(SOLD,T,P)
      RS = P/(RP*RTF(T))
      R15 = R15F(RS,T)
      R15SQ = R15*R15
      R15FT = R15SQ*R15SQ
      C      COMPUTATION OF THE SALINITY
      SNEW = -0.08996D0 + 28.2972D0*R15 + 12.80832D0*R15SQ
      1      - 10.67869D0*R15SQ*R15 + 5.98624D0*R15FT
      2      - 1.32311D0*R15FT*R15
      DELTAS = DABS(SNEW - SOLD)
      SOLD = SNEW
      IF (DELTAS.GT.TOLER) GO TO 10
      FOF = SNEW
      RETURN
      END

```



DOUBLE PRECISION FUNCTION SALINI (T,P,G)  
 IMPLICIT REAL\*8 (A-H,O-Z)

PROGRAMMED BY TREVOR SANKEY IDS WORMLEY  
 RETURNS SALINITY IN PARTS PER THOUSAND  
 ARGUMENTS P PRESSURE IN DECIBARS  
 T TEMPERATURE DEGREES C (T48)  
 G CONDUCTIVITY IN MMHDS/CM

VALIDITY P 0.0 TO 6000.0, T 0.0 TO 30.0, SALINITY 30.0 TO 40.0

N.B. FOR THIS TEST ONLY COMMENT SYMBOL PUT ON THE T68 TO T48  
 STATEMENT. REMOVE THE COMMENT SYMBOL IF T68 USED.

CONVERT TO 1948 TEMPERATURE SCALE

$T = (-5.80D-6 * T + (1.00 + 4.88D-4)) * T$

$CG = ((-7.9D-6 * T + 8.3089D-4) * T - 4.5302D-2) * T + 1.5192D0$

$F = ((3.3D-13 * P - 3.3913D-8) * P + 1.042D-3) * P$

$H = (-2.492D-9 * P + 2.577D-5) * P + 4.0D-4$

$CJ = ((-1.657D-4 * T + 8.276D-3) * T - 0.1535D0) * T + 1.00$

$CL = -7.6D-5 * T + 6.95D-3$

$P = (F * CG + H * CJ) * 0.01D0$

RESULTANT COEFFICIENTS  $A + D * S = G(P, T, S) / G(0, T, S)$

$D = -B * CL$

$A = -D * 35.00 + B + 1.00$

TEMPERATURE VARIATION OF CONDUCTIVITY (CREASE FIT)

$CP = (((-0.532272D-8 * T - 2.924138D-7) * T + 1.019834D-4) * T$   
 $+ 0.02011813D0) * T + 0.676538D0$

CALCULATE RATIO  $G(P, T, S) / G(0, T, 35)$   $G(0, 15, 35)$  IS ASSUMED TO  
 BE 42.896

$RTS = G / (42.896D0 * CP)$

TERM IN THE TEMPERATURE CORRECTION TO CONDUCTIVITY RATIO (B AND A)

$Q = (-8.9D-4 * T + 8.0D-2) * T - 1.00$

CALCULATION OF THE SALINITY

THIS IS A STRONGLY CONVERGENT ITERATIVE PROCESS AS THE PRESSURE  
 CORRECTION IS WEAKLY DEPENDENT ON SALINITY. THE CALCULATION IS  
 DONE TWICE.

FIRST USING SALINITY OF 35.0 TO GET AN INTERMEDIATE VALUE OF S

SECOND USING THE INTERMEDIATE S TO GET THE FINAL RESULT.

THE RESULTING ERRORS ARE LESS THAN 0.0003 PPT.

$SALINI = 35.00$

$DO 10 I = 1, 2$

CALCULATE THE PRESSURE CORRECTION AS A FUNCTION OF SALINITY

$RP = D * SALINI + A$

APPLY THE PRESSURE CORRECTION TO GIVE  $G(0, T, S) / G(0, T, 35)$

$RT = RTS / RP$

APPLY THE TEMPERATURE CORRECTION TO RATIO

TO GET  $G(0, 15, S) / G(0, 15, 35)$

$R = (((-4.5D-3 * RT + 0.022D0) * RT - 0.0175D0) * Q + 1.00) * RT$

APPLY THE INT. TABLES FORMULA TO GET SALINITY

$SALINI = ((((-1.32311D0 * R + 5.98624D0) * R - 10.67869D0) * R$   
 $+ 12.80832D0) * R + 28.2972D0) * P - 0.08996D0$

10 CONTINUE  
 RETURN  
 END



Government  
Publication





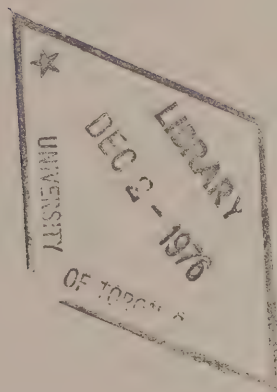
CA1 EP 521

- 76R22

UNIVERSITY OF TORONTO  
LIBRARY

# THE EXCHANGE OF DEEP WATER IN ALBERNI INLET

W.H. Bell



INSTITUTE OF OCEAN SCIENCES, PATRICIA BAY  
Victoria, B.C.

For additional copies or further information, please write to:

Environment Canada  
Institute of Ocean Sciences, Patricia Bay  
512 - 1230 Government Street  
Victoria, B.C.  
V8W 1Y4



THE EXCHANGE OF DEEP WATER IN ALBERNI INLET

by

W.H. Bell

Institute of Ocean Sciences, Patricia Bay  
Victoria, B.C.

September 1976

This is a manuscript which has received only limited circulation. On citing this report in a bibliography, the title should be followed by the words "UNPUBLISHED MANUSCRIPT" which is in accordance with accepted bibliographic custom.

## ABSTRACT

The deep water in Alberni Inlet appears to undergo renewal on an annual basis, with the replacement water arising from upwelling on the west coast. Available water property data are examined via time series plots and temperature-salinity diagrams for evidence to support this theory.



## TABLE OF CONTENTS

	Page
Abstract .....	i
Table of Contents .....	ii
List of Figures .....	iii
Introduction .....	1
Upwelling As A Source .....	3
Examination Of Time Series Data .....	4
Temperature-Salinity Relationships .....	11
Conclusion .....	18
References .....	19

## LIST OF FIGURES

	Page
Figure 1. Plan view and longitudinal section of Alberni Inlet, showing station locations .....	2
Figure 2. Annual variation of dissolved oxygen at a depth of 100 m in the inner basin of Alberni Inlet, 1939-1968 ...	5
Figure 3. Annual variation of salinity at a depth of 100 m in the inner basin of Alberni Inlet, 1939-1971 .....	6
Figure 4. Annual variation of temperature at a depth of 100 m in the inner basin of Alberni Inlet, 1939-1971 .....	7
Figure 5. Time-depth contours for specific gravity anomaly at Stn. A-7A, 1965-1966 .....	9
Figure 6. Time-depth contours for dissolved oxygen at Stn. A-7A, 1965-1966 .....	10
Figure 7. T-S diagram for the inner basin of Alberni Inlet, 1966..	12
Figure 8. T-S diagram for the inner and outer basins of Alberni Inlet, 1957 and 1966 .....	13
Figure 9. T-S diagram for the inner and outer basins of Alberni Inlet, 1954 and 1961 .....	14
Figure 10. T-S diagram for the inner and outer basins of Alberni Inlet, 1959 .....	16
Figure 11. T-S diagram for the inner and outer basins of Alberni Inlet, 1941 .....	17





## INTRODUCTION

Alberni Inlet is located on the west coast of Vancouver Island, connecting with the Pacific Ocean through both Trevor Channel and Imperial Eagle Channel (Fig. 1). The total length is about 69 km, whichever channel is followed, and the mean width is about 1.3 km (Pickard, 1963). The system comprises a comparatively small inner basin at the east end of Alberni Inlet and a much larger outer basin extending westward to the ocean. The inner and outer basins are separated by a shallow sill at a depth of about 37 m, in the vicinity of Sproat Narrows. The extreme westerly end of the outer basin is separated from the ocean by another shallow sill, at a depth of about 40 m. However, there is a deeper waterway between the outer basin and the Pacific Ocean, via Imperial Eagle Channel and Junction Passage, where the shallowest depth is about 88 m. Junction Passage connects to Trevor Channel near the mid-point of the outer basin.

The harbour area immediately adjacent to Port Alberni, at the eastern end of the system, has been extensively studied for many years because of the existence of a pulp mill in that area. Much research has also been done in relation to the near-surface water of the inner basin, because the mill effluent is dispersed within this layer. Interest has now been aroused in the exchange of the deep waters in connection with dredge-spoil dump in the inner basin. There have been relatively few measurements actually made in the deep waters of either the inner or outer basin. The data have been due principally to Waldichuk *et al.* (1968), with some earlier measurements obtained by the Pacific Oceanographic Group (1957), and one comprehensive cruise by the Institute of Oceanography at the University of British Columbia (1959).

The data which are available strongly suggest an annual renewal of the deep water in both basins. The likely source of this water is upwelling on the Pacific coast. This phenomenon as a source of water for annual rejuvenation of the outer basin water was suggested as a possibility by Tully (1949). The suggestion was subsequently supported by Pickard (1963) on the basis of some additional observations.

Figure 1. Plan view and longitudinal section of Alberni Inlet, showing station locations.

## UPWELLING AS A SOURCE

Upwelling along the west coast of Vancouver Island is known to occur in the summer months, apparently with great regularity, as reported by Tully (1949), Pickard (1953, 1963), Doe (1955) and Lane (1963). Beginning (usually) in the months of April or May and continuing through September, the winds along the coast blow predominantly from the north-west. The stress on the water surface causes a divergence resulting in, after the time lag involved in accelerating large water masses, a net transport off-shore. The replacement waters arise in part, at least, from upwelling of the deeper ocean waters.

At some point, the upwelled water, with its relatively higher density, begins running into the outer basin of the inlet system via Junction Passage. It accumulates at a depth appropriate to its density. The resident water in the outer basin is then uplifted and eventually starts flowing into the inner basin, replacing some deep water there. In this case, one would expect a temperature-salinity (T-S) diagram to show that the deep water in the inner basin is the same as water from intermediate depths in the outer basin (providing the data were obtained at the appropriate time). A slight increase in oxygen levels could be expected because the mid-depth water normally contains more dissolved oxygen (DO) than the deeper water. If the process continues for a sufficient length of time, one would expect complete replacement of the outer basin water, below some depth which depends on the magnitude of the upwelling, with nearly homogeneous water having the properties of the upwelled coastal water, i.e. the salinity will be increased and the temperature decreased compared to the water originally resident in the basin. Likewise, there would be an increase in DO to a value which, while still not large, is relatively greater than the previous value. At this point, the "new" water in the outer basin might be in a position to spill over into the inner basin until it, too, becomes homogeneous in the deep water. If the upwelling process is very intense, higher density water should pour into the inner basin via both Junction Passage and the seaward end of Trevor Channel, hastening the exchange process. Since the nature of the upwelling may change somewhat over time, the basin water may not be completely homogeneous and there will likely be some differences in water characteristics between inner and outer basins. However, if complete renewal of deep water in both basins does occur in the same year, one would expect the T-S diagrams to show the same general trend (especially immediately after cessation of renewal) because the water is from the same source.

It is actually possible for upwelling to occur at any time of the year when the wind blows strongly from the north-west for a sufficient length of time. An exchange of basin water at intermediate depths may then occur, depending on the relative densities.



When exchanges are not actively occurring, then other processes take over. In particular, in the deep water, diffusive processes predominate. This results in a gradual reduction of salinity and an increase in temperature, in general. DO is also reduced by diffusion, but the situation here is further complicated by oxidation processes.

#### EXAMINATION OF TIME SERIES DATA

The first evidence for an annual renewal of inner basin water is shown in Fig. 2, where the available DO data at 100 m depth for eleven different years are plotted on a time axis spanning one year. The data are from a location at or near Stn. A-7A. Monthly values are available for the 1966 period and these are emphasized by connecting them with a solid line. While there is a sparsity of data in the late winter months, the tendency for samples taken during the other seasons, in all of the years, to fall approximately along the same curve is remarkable. This portion of the data represents a period when diffusive processes are holding sway. For each year, if water renewal had not occurred in the preceding spring season, then one would expect the DO in the deep water to have disappeared almost completely (on the basis of the rates of change implied by the data) unless the downward diffusion of oxygen was sufficient to hold it just above an anoxic state.

Similar plots are given for salinity (Fig. 3) and temperature (Fig. 4) at a depth of 100 m. In all of the plots, it is apparent that Alberni Inlet falls into the general behavioural classification of "saw tooth", as given by Pickard (1975) for various other British Columbia inlets, wherein there is an annual variation consisting of a rapid rise of the property values, followed by a slower decline. Especially in the 1966 data, there appears to be a definite lag between the onset of the increase in DO and the increase in salinity or decrease in temperature, as well as in the occurrence of peak values of these properties. A possible explanation for this is suggested below, during the consideration of depth-time plots. However, it should be pointed out here that the lag may not be as pronounced as it first appears to be, with the deception arising from the considerable length of time between samples.

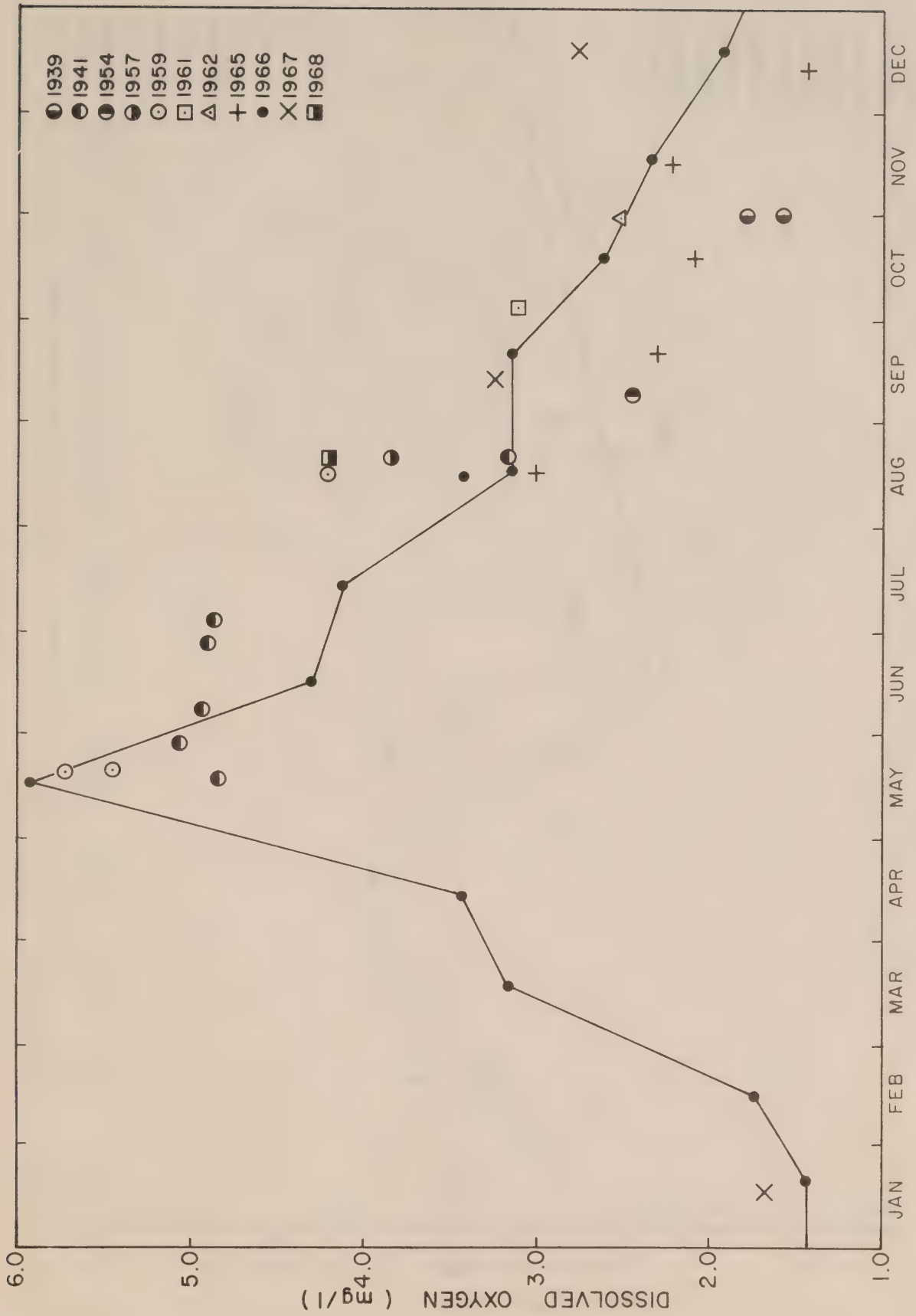


Figure 2. Annual variation of dissolved oxygen at a depth of 100 m in the inner basin of Alberni Inlet, 1939-1968.



Figure 3. Annual variation of salinity at a depth of 100 m in the inner basin of Alberni Inlet, 1939-1971.



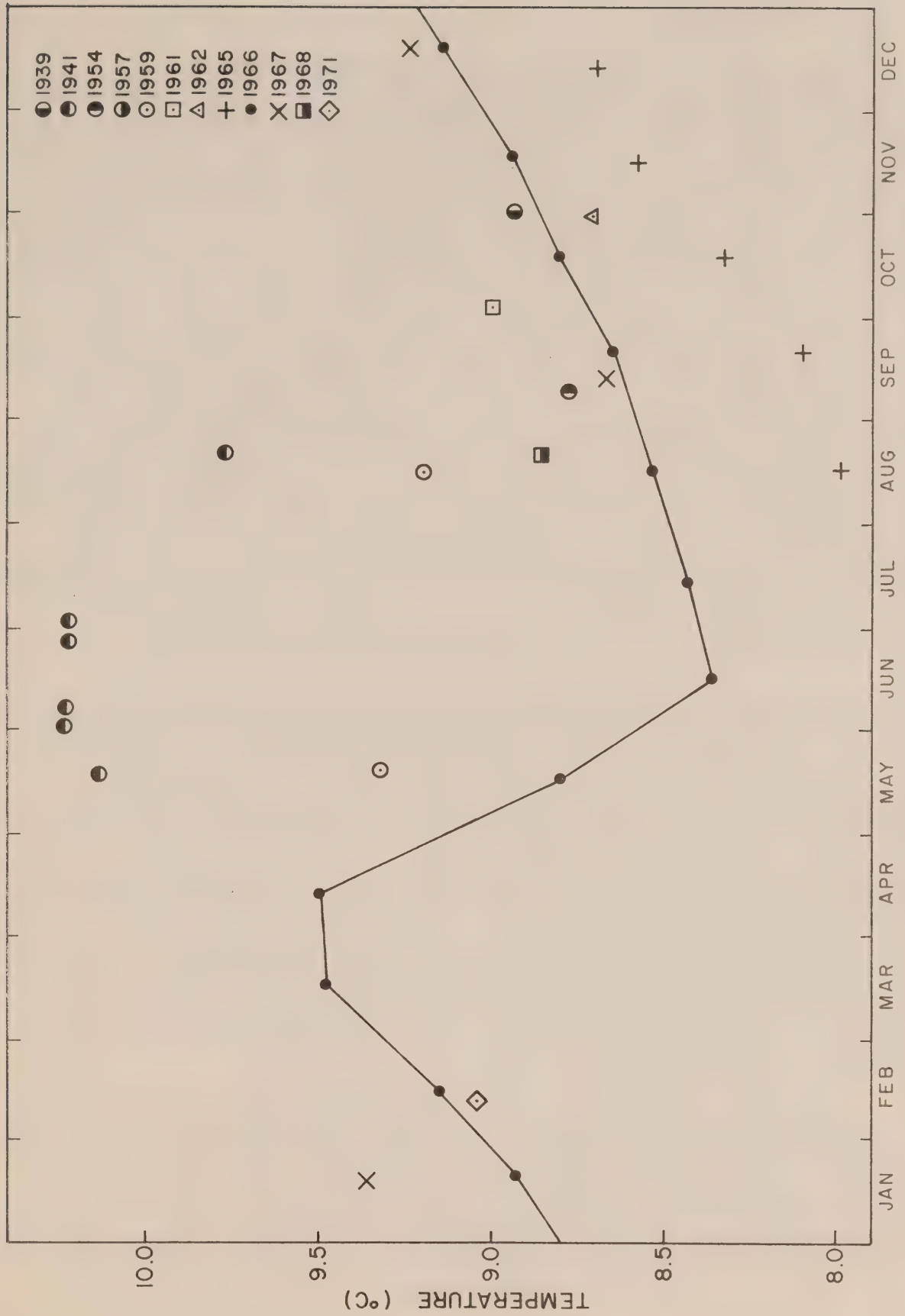


Figure 4. Annual variation of temperature at a depth of 100 m in the inner basin of Alberni Inlet, 1939-1971.

Fig. 5 is a depth-time plot for the density structure at Stn. A-7A in the inner basin, covering the period of July 1965 through January 1967. Density, as exemplified by specific gravity anomaly ( $\sigma\text{-T}$ ), generally follows the same trend as salinity. Fig. 6 is a similar plot for DO. These plots are derived from monthly samples at standard depths. At the beginning of the period in 1965, it is clear that there has been a recent renewal of all of the basin water below sill depth because of the relatively high density and because of the homogeneity indicated by both the  $\sigma\text{-T}$  and DO plots. In October 1965, there is an indication of an incursion of water at a depth of about 50 m. This is shown by a slight uplift in the isopleths for both  $\sigma\text{-T}$  and DO, due to the displacement upwards of the lower-density resident water with its particular DO content. In late January and early February of 1966, it is likely that water of approximately the same density as that at a depth of 75 m or so in the inner basin appeared at the sill and began running into the basin. This water had a slightly higher DO content than the resident water. Again, as the influx continued, the less dense water was displaced significantly upwards as shown by the  $\sigma\text{-T}$  contours for 24.0 and less. The 24.5 contour was not affected at this time. The displacement is also shown in the DO contours, where water of relatively low DO content was raised to a much higher position in the water column. These data for Stn. A-7A are consistent with similar data from at least two adjacent hydrographic stations, supporting the supposition that the influxes are real rather than spurious products of aliasing. Given sufficient information about the basin geometry, it would be possible to calculate the approximate volumes of water involved in such mid-depth exchanges.

Moving into the upwelling season, apparently commencing about late March in 1966 and continuing into June, it is apparent from the plots that water of high density and high DO content was coming into the inner basin. At first, the upwelled water was relatively high in DO, increasing the inner basin content to a maximum of 6 mg/l in May. As the upwelling continued even more strongly, bringing up water from greater depths off the west coast, the density was increased but the DO level was reduced. Thus, the density peaked in June, lagging somewhat behind the oxygen peak. At this time, the inner basin water had been completely exchanged, leaving it almost homogeneous below 20 m depth. While actual data is lacking for the outer basin during the same period, it can be assumed from the nature of the process that the outer basin water was also nearly homogeneous over much of its depth. In fact, it probably contained deep water of even greater density than that in the inner basin because of the much greater depth of the passage connecting the outer basin with the open ocean, a postulate supported by an examination of data obtained in August.

In October–November of 1966, a situation analogous to that observed at approximately the same time in the previous year prevailed. An incursion of water had occurred to a depth of about 60–70 m, resulting in a substantial uplift of the water property isopleths. Two sets of data obtained in September and December of 1967 (not shown in the figures) strongly suggest that a major influx also occurred in that year. Certainly, in contrast to the uncertainty about DO sources or sinks, one can only

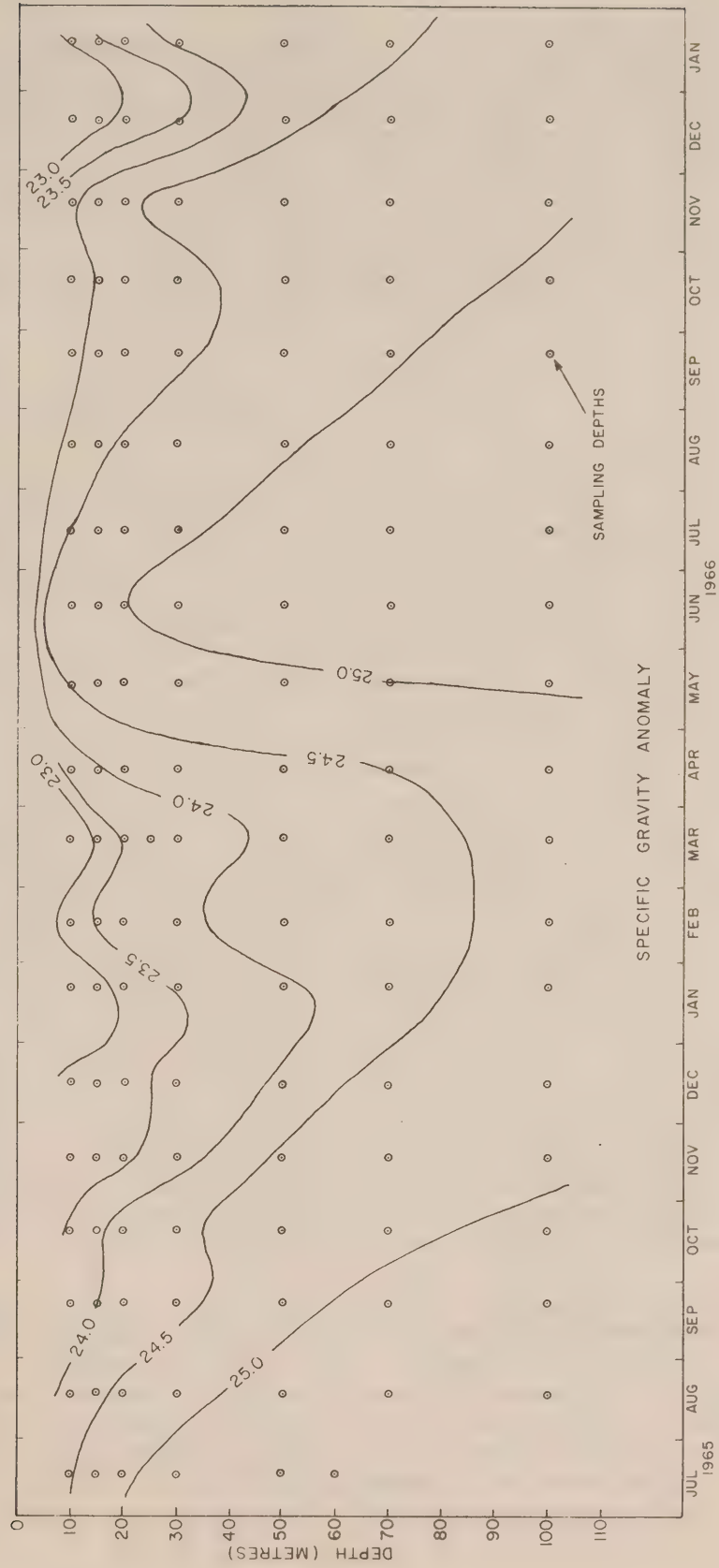


Figure 5. Time-depth contours for specific gravity anomaly at Stn A-7A, 1965-1966.



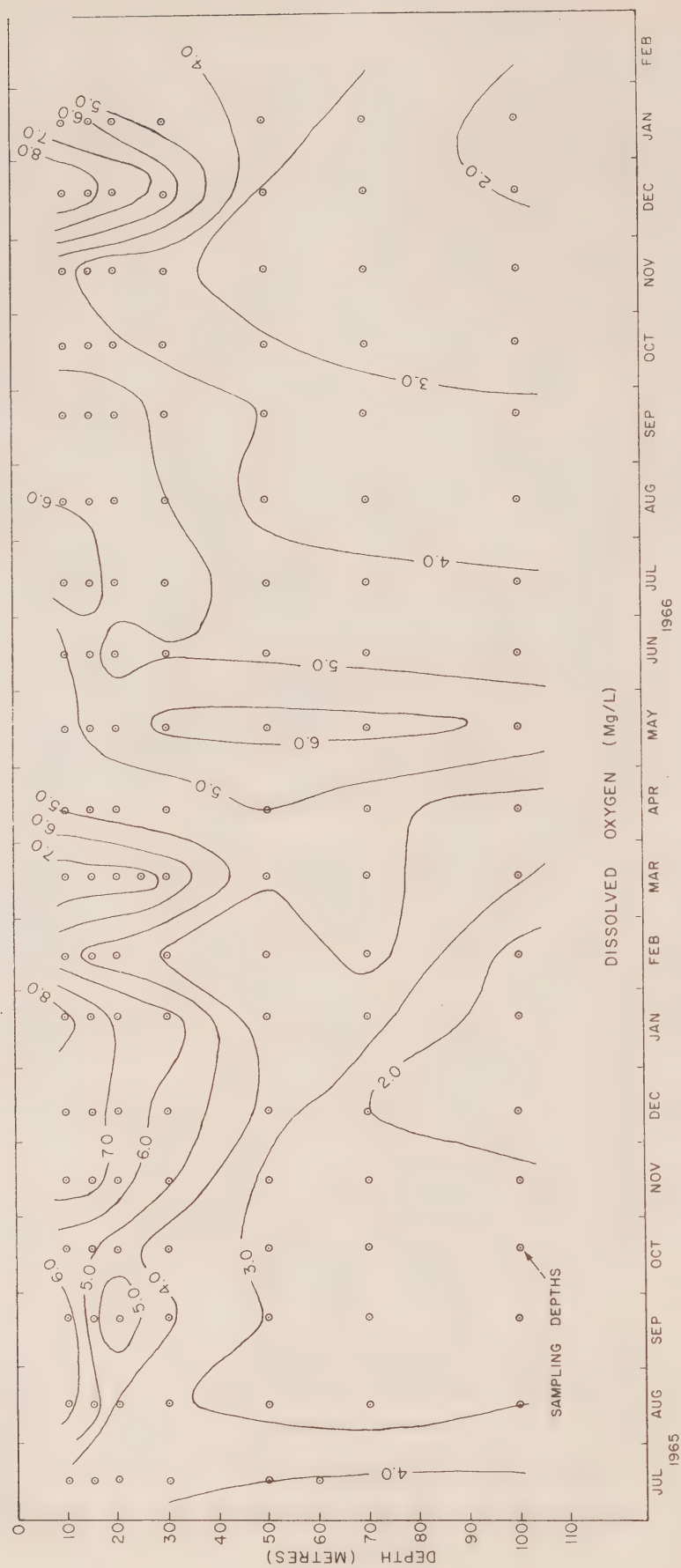


Figure 6. Time-depth contours for dissolved oxygen at Stn A-7A, 1965-1966.

expect the deep water to become less dense as time progresses. More particularly, the density of the water normally depends much more on salinity than it does on temperature and the only source for high salinity water is upwelling on the west coast. Judging again from the available data, it appears that salinity may be reduced by almost  $1^{\circ}/\text{oo}$  per year by the downward diffusion of fresh water. On this basis, if an annual exchange did not occur, one would then expect to see in the following year values for salinity, at a depth of 100 m in the inner basin, of less than  $31.1^{\circ}/\text{oo}$ . In fact, the minimum value in any of the data sets is greater than  $31.7^{\circ}/\text{oo}$ .

#### TEMPERATURE-SALINITY RELATIONSHIPS

We now turn to an examination of T-S relationships. In nine instances in eight years, data are available simultaneously from stations in each of the inner and outer basins. Unfortunately, in only one case were the data obtained near the anticipated time of complete renewal of the basin water. In most cases, the data were taken well after such time. Thus, in any inter-basin comparisons, it is necessary to make allowances for the effect of diffusion and for the likelihood of higher density deep waters in the outer basin because of the Junction Passage connection to the coast. First, as an example of the kind of information one can gain about the water within a given basin, consider Fig. 7. Data are plotted for each of six months. For the initial three months, deep water changes are attributed to diffusion. By following the data point at a depth of 100 m, it can be seen that the density is decreasing. Then, an exchange process starts sometime in February, with denser water replacement occurring near 50 m. In March, the influx is apparent at 70 m. By mid-April, there has been a considerable increase in density at 70 m. The water at a depth of 100 m has not yet begun to increase in density, but the rate of reduction of this property by diffusion has been greatly reduced. In May, and again in June, a very substantial increase in density has taken place at all depths, indicating complete exchange of the basin water. The clustering of the data points shows the near homogeneity of the water mass. From this point on, the data (not plotted) again show a gradual reduction in density due to diffusion. For depths shallower than about 50 m, changes in water properties may be influenced by storms, run-off, entrainment and uplifted water from inflows at intermediate depths. Such changes are much more difficult to follow on a T-S diagram than are the deep water changes.

The available data have served to point out that the water in both basins generally exhibited considerable differences in properties from year to year, but in any given year there was a strong correspondence in water properties between inner and outer basins. This suggests, as previously postulated, that consistent renewal of the deep water in both basins was occurring from the same source. Figs. 8 and 9 are given here as specific illustration of this in four particular years. For each year, a T-S curve is shown for a station in each basin. The correspondence of water types

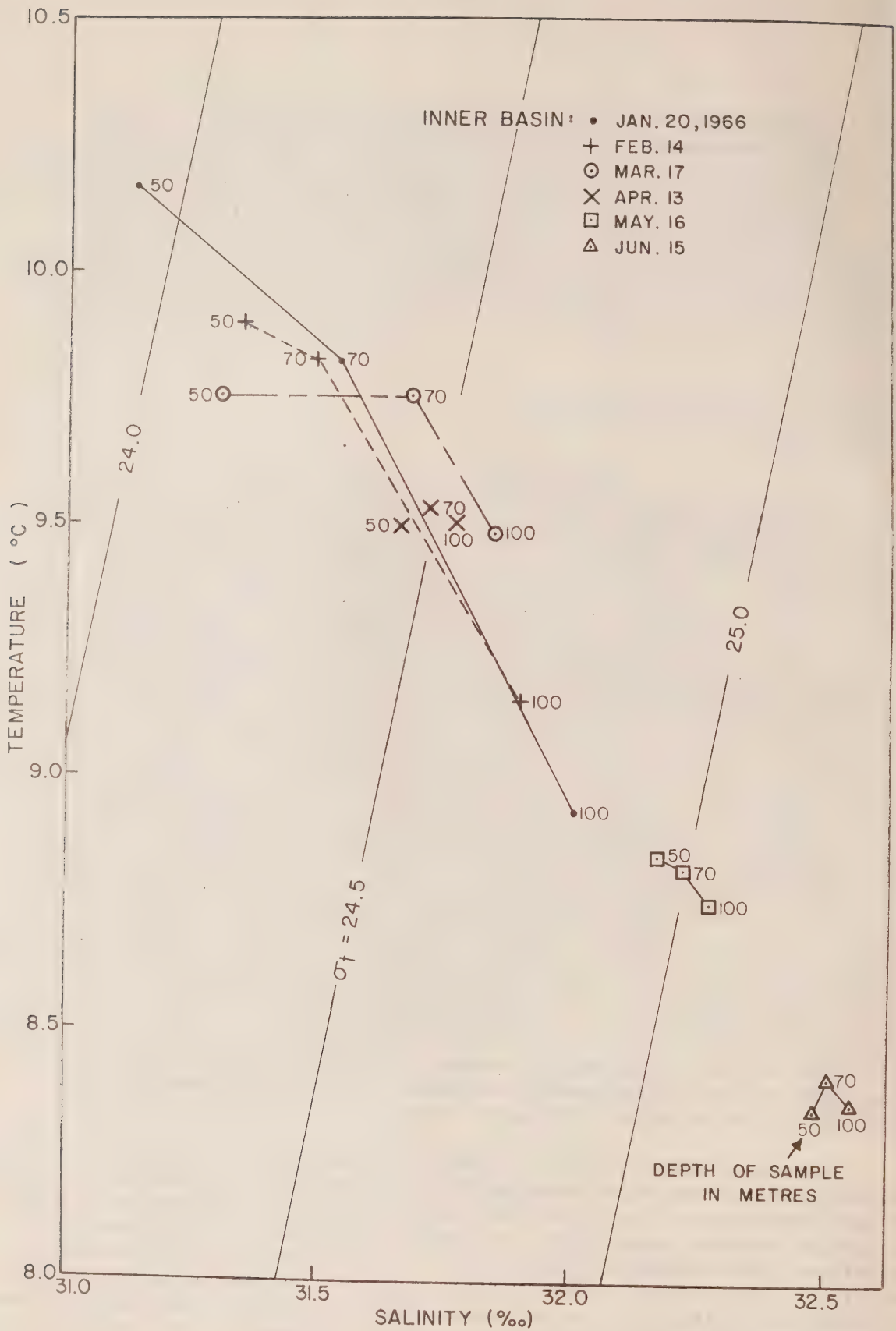


Figure 7. T-S diagram for the inner basin of Alberni Inlet, 1966.



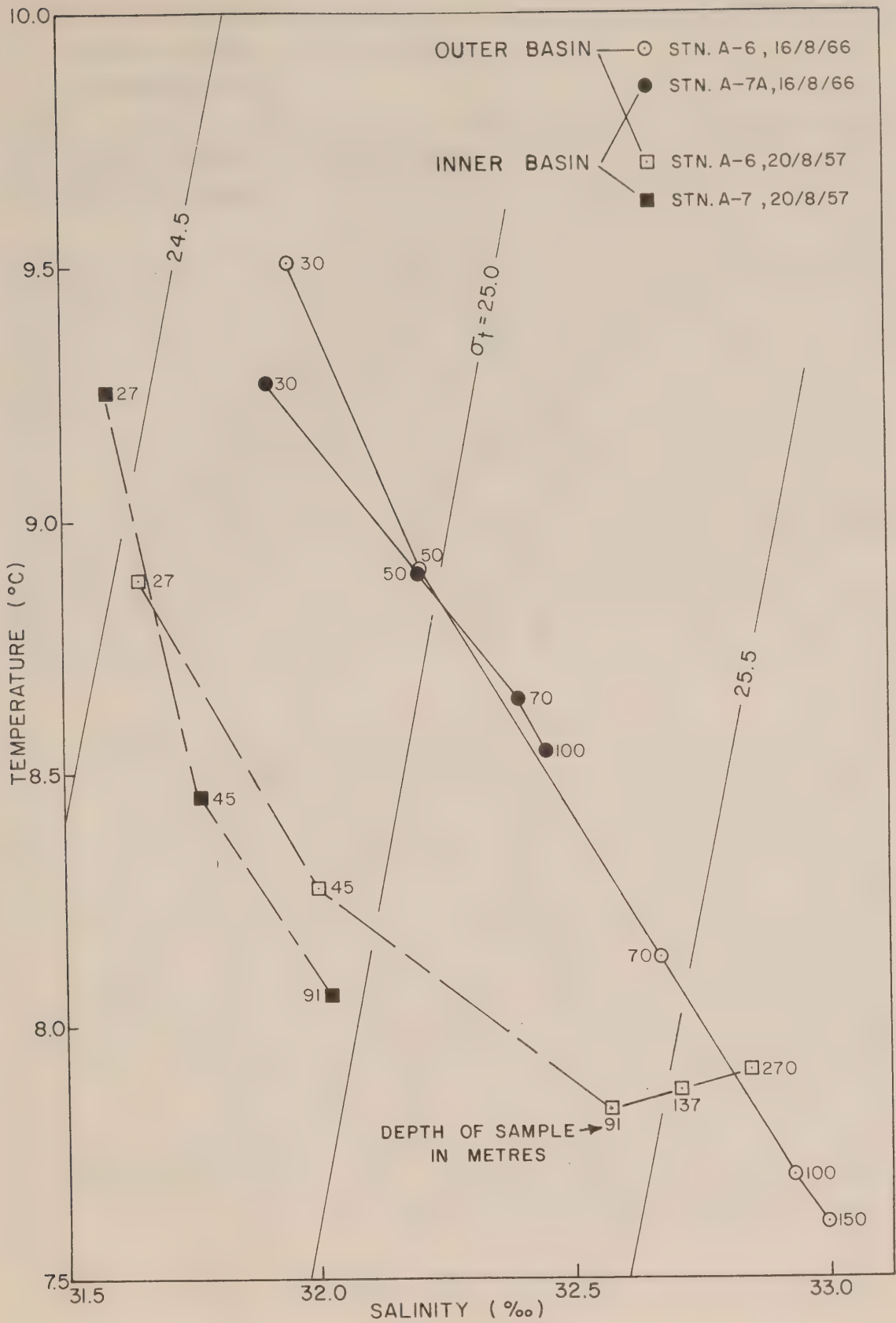


Figure 8. T-S diagram for the inner and outer basins of Alberni Inlet, 1957 and 1966.

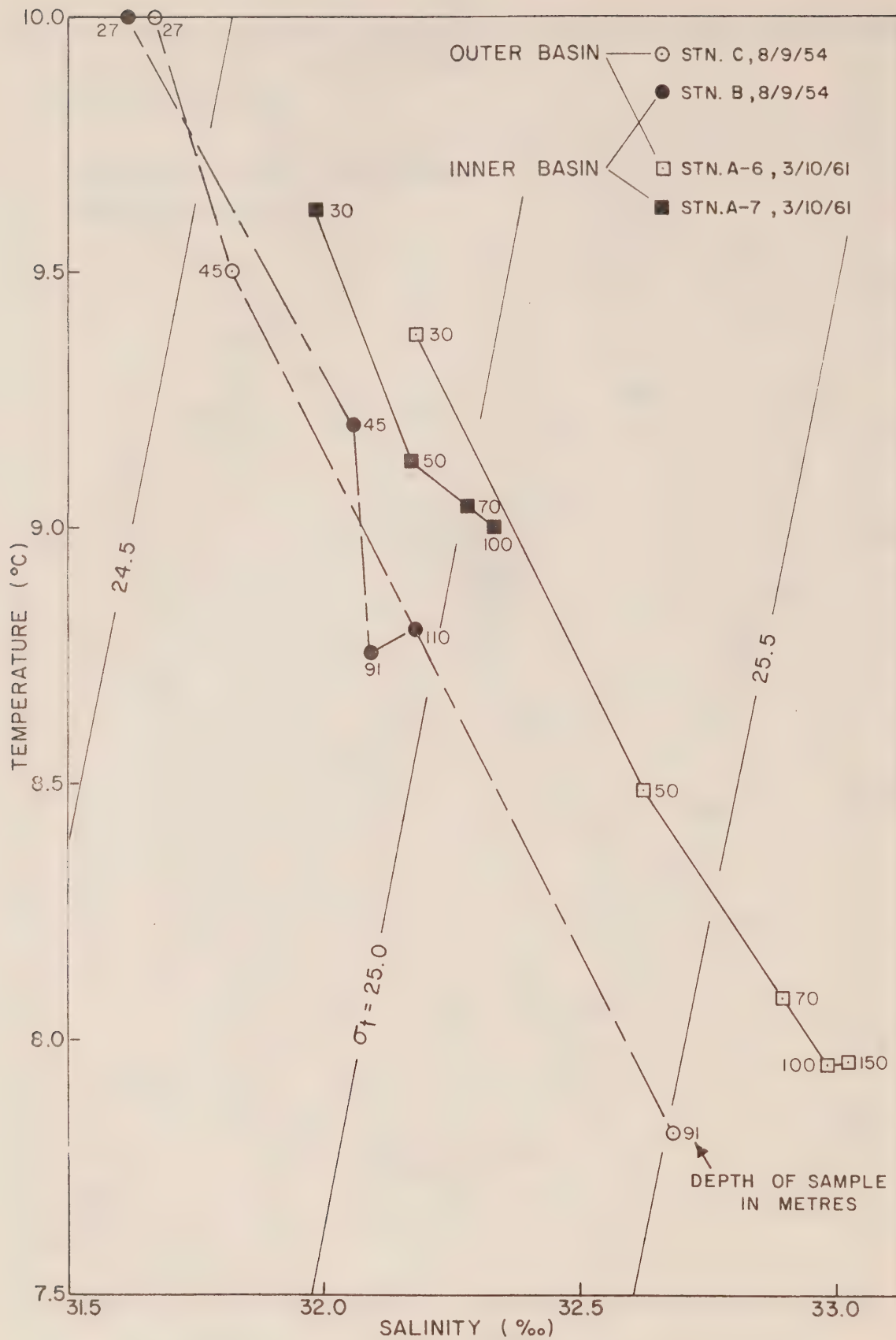


Figure 9. T-S diagram for the inner and outer basins of Alberni Inlet, 1954 and 1961.

is indicated by the proximity of the inner and outer basin curves to one another, again making allowances for the effects previously noted. In addition, further confirmation is given for another two years in two subsequent T-S diagrams (Figs. 10 and 11).

The T-S diagram in Fig. 10 presents the data obtained for both basins on two occasions in 1959. For the outer basin, the water in May was considerably less dense than it was in the following August, indicating an influx at some time during the intervening period. The water below a depth of 50 m, in August, was all of higher density than any of the water resident in the basin in May. Above 50 m, that water mass shows different properties in August than in May, indicating that replacement had occurred over the whole depth of the basin. For the inner basin, the density of the water at a depth of 100 m in August corresponded approximately to the outer basin water at 30 m in the same month. Since there was no question of accessibility, the depth of the sill separating the basins being about 37 m, one assumes that the same water mass was involved, spilling into the inner basin to a depth appropriate to its density. Further reinforcement of this suggestion is provided by the DO values, which were 4.22 mg/l in both instances, and by the fact that the August T-S curves were nearly coincident and quite different in slope from the May curves. Therefore, it appears likely that complete replacement of the water in both basins occurred, from the same eventual source.

An earlier occasion on which some concurrent data occurs for both basins is 1941. The T-S curves are shown in Fig. 11. The character of the water in the outer basin (Stn. C) appears, from an examination of additional intervening sets of data, to have been changing more or less continuously over the period shown, i.e. from May into July. Thus, it seems that water upwelling on the coast was running into the outer basin for much of this period, replacing and uplifting the resident water. The July data suggest that nothing very drastic was yet occurring in the inner basin, although the water at sill depth seems to be sufficiently dense to be capable of flowing into the basin to a depth of about 100 m. Whatever may have happened at this point, it is certain that flushing of the inner basin had been accomplished before the end of August. The replacement water corresponds in properties to that found below sill depth in the outer basin in July. The inference is that upwelled water continued to run into the outer basin for some portion of the July-August period, raising the water from 50 or 60 m to sill depth. This water then proceeded to flush out the inner basin. Of particular interest in 1941 is the fact that temperatures throughout the water column in both basins were appreciably higher than those observed at any other time. The year 1941 was also one of unusually high temperature in the eastern Pacific Ocean, as demonstrated by the daily seawater samples taken at west coast lighthouses (Hollister, 1972; Tabata, 1976).



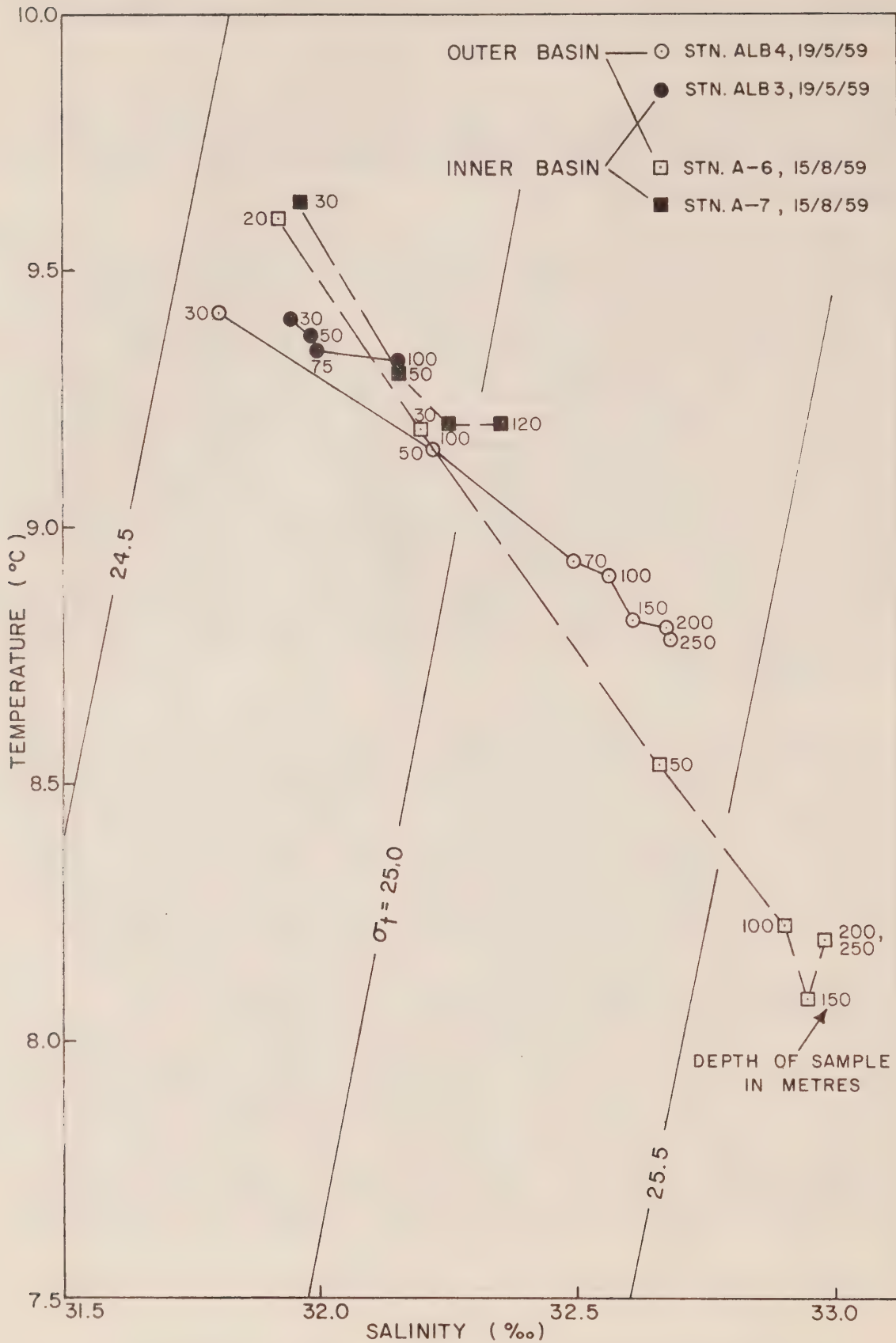


Figure 10. T-S diagram for the inner and outer basins of Alberni Inlet, 1959



Figure 11. T-S diagram for the inner and outer basins of Alberni Inlet, 1941

## CONCLUSION

In most years for which data are available, there is substantial evidence to indicate that a complete renewal of the water in both the inner and outer basins of Alberni Inlet has occurred in that year. There is a further implication, because of the prevailing magnitudes of water property values and the effect that diffusion would have on these values, that renewal has also occurred in each year preceding a year for which data were obtained. The only reasonable source of new water is upwelling of deep ocean water off the west coast. Also, the period during which the flushing of the basins begins would seem to coincide with the onset of the upwelling season. Since an apparently invariable annual cycle of winds is the chief cause of upwelling, it seems very likely that an annual cycle of renewal of the waters of Alberni Inlet will also prevail.



## REFERENCES

- Doe, L.A.E. 1955. Offshore Waters of the Canadian Pacific Coast. J.Fish. Res. Bd. Can., 12(1): 1-34.
- Fisheries Research Board of Canada, Pacific Oceanographic Group, 1957. Physical and chemical data record, Alberni Inlet and Harbour, 1939 and 1941. Ms. Rept. Nanaimo, B.C.
- Hollister, H.J. 1972. Sea Surface Temperature and Salinities at Shore Stations on the British Columbia Coast 1914-1970. Pac. Mar. Sci. Rept. 72-13. Environment Canada, Marine Sciences Directorate. Victoria, B.C.
- Lane, R.K. 1963. A model of seawater structure near the west coast of Vancouver Island, British Columbia. J. Fish. Res. Bd. Can., 20(4): 939-967.
- Pacific Oceanographic Group. 1957. Physical and chemical data record, Alberni Inlet and Harbour, 1939 and 1941. Ms Rept., Nanaimo Biol. Sta.
- Pickard, G.L. 1963. Oceanographic Characteristics of Inlets of Vancouver Island, British Columbia. J.Fish. Res. Bd. Can., 20(5): 1109-1144.
- Pickard, G.L. 1975. Annual and Longer Term Variations of Deep Water Properties in the Coastal Waters of Southern British Columbia. J. Fish. Res. Bd. Can., 32(9): 1561-1587.
- Pickard, G.L. and D.C. McLeod. 1953. Seasonal Variation of Temperature and Salinity of Surface Waters of the British Columbia Coast. J.Fish. Res. Bd. Can., 10(3): 125-145.
- Tabata, S. 1976. Personal communication.
- Tully, J.P. 1949. Oceanography and Prediction of Pulp Mill Pollution in Alberni Inlet. Fish. Res. Bd. Can. Bull., no. 83.
- University of British Columbia, Institute of Oceanography. 1959. British Columbia inlet cruise, 1959. Data Report No. 15. Vancouver, B.C.
- Waldichuk, M., J.H. Meikle, and W.F. Hyslop. 1968. Alberni Inlet and Harbour Physical and Chemical Oceanographic Data, 1954-1967. Fish. Res. Bd. Can. Ms. Rept., no. 937.
- Waldichuk, M. and J.H. Meikle. 1968. Unpublished data record. Alberni Inlet - Muchalat Inlet - Quatsino Sound and Discovery Passage - 19 Aug. - 1 Sept. 1968. Pacific Environment Institute, West Vancouver, British Columbia.









CAI EP 321

- 76R23

Copy  
P. 100

**OCEANOGRAPHIC OBSERVATIONS AT OCEAN STATION P**

**(50° N., 145° W.)**

**Volume 71**

**9 January – 18 February 1976**



**INSTITUTE OF OCEAN SCIENCES, PATRICIA BAY  
Victoria, B.C.**



For additional copies or further information please write to:

Environment Canada

Institute of Ocean Sciences, Patricia Bay

512 - 1230 Government Street

Victoria, B. C.

V8W 1Y4



CAI EP 88

-76 R23

*Pacific Marine Science Report 76-23*

OCEANOGRAPHIC OBSERVATIONS AT OCEAN STATION P (50°N, 145°W)

Volume 71

9 January - 18 February 1976

Institute of Ocean Sciences, Patricia Bay  
Victoria, B.C.

November, 1976

This is a manuscript which has received only limited circulation. On citing this report in a bibliography, the title should be followed by the words "UNPUBLISHED MANUSCRIPT" which is in accordance with accepted bibliographic custom.

### ABSTRACT

Physical, chemical and biological oceanographic observations are made from the weathership at Ocean Weather Station Papa, and between Esquimalt and Station Papa, on a routine continuing basis. Physical oceanography data only are shown, including profiles obtained with bottle casts, and conductivity-temperature-pressure instruments. Surface observations are also shown.





## INTRODUCTION

Canadian operation of Ocean Weather Station P (Latitude 50°00'N, Longitude 145°00'W) was inaugurated in December, 1950. The station is occupied primarily to make meteorological observations of the surface and upper air and to provide an air-sea rescue service. The station is manned by two vessels operated by the Marine Services Branch of the Ministry of Transport. They are the CCGS Vancouver and the CCGS Quadra. Each ship remains on station for a period of six weeks, and is then relieved by the alternate ship, thus maintaining a continuous watch.

Bathythermograph observations have been made at Station P since July 1952. A program of more extensive oceanographic observations commenced in August 1956. This was extended in April 1959, by the addition of a series of oceanographic stations along the route to and from Station P and Swiftsure Bank. These stations are known as Line P stations. The number of stations on Line P has been increased twice and now consists of twelve stations (Fig. 1). Bathythermograph observations and surface salinity sample collections, in addition to being made on Line P oceanographic stations, are also made at odd meridians at 40', i.e. 139°40'W, 141°40'W, etc. These stations are known as Line P BT stations. Data observed prior to 1968 has been indexed by Collins et al. (1969).

The present record includes hydrographic, continuously sampled STP and surface salinity and temperature data collected from the CCGS Quadra during the period 9 January to 18 February 1976.

All physical oceanographic data have been stored by the Canadian Oceanographic Data Centre (CODC), 615 Booth Street, Ottawa, Ontario, Canada. Requests for these data should be directed to CODC.

Biological and productivity data are published in the Manuscript Report series of the Fisheries Research Board of Canada (FRB), Pacific Biological Station, Nanaimo, British Columbia, Canada. Requests for these data should be directed to FRB.

Marine geochemical data are for the Ocean Chemistry Group, Ocean and Aquatic Sciences, Environment Canada, 512-1230 Government Street, Victoria, British Columbia, Canada.

PROGRAM OF OBSERVATIONS FROM CCGS QUADRA, 9 JANUARY - 18 FEBRUARY 1976  
(P-76-1) (CODC Ref. No. 15-76-001)

Oceanographic observations were made by Mr. B. R. de Lange Boom and Mr. L. Blower of Seakem Oceanography Ltd., Victoria, B.C.

Enroute to Station P, Line P Stations 2 and 5 were occupied and a hydrocast done; Station 2 to near bottom, Station 5 to 1500 metres. All other stations were missed due to poor weather. No STP profiles were taken because of instrument problems.

Salinity, nitrate, alkalinity and total CO<sub>2</sub> samples were taken from the seawater loop at Stations 1-8 and 12. Stations 9-11 surface samples were collected from a bucket when the seawater loop was not operational. A bucket was used to collect surface salinity samples at Stations 1-5, and salinity samples were also taken from the loop for Line P BT, or half stations 5½ to 12½.

Mechanical BT or XBT's were taken at all stations but 3, 4, and 6.

Surface tarball tows were made at Stations 8 and 10.

At Station P the oceanographic program was carried out as follows:

I. Physical Oceanography

- 1) Profiles of salinity, temperature and oxygen were obtained from 6 hydrographic stations to near bottom (4200 metres), except cast 4 which reached only 3000 metres.
- 2) 8 STP profiles to 1500 metres, 1 to 800 m, 6 to 700 m, and 1 to 300 metres were obtained. Problems with the deck unit prevented completion of each deep cast to 1500 m.
- 3) BT's were taken every three hours to coincide with meteorological observations, encoded and transmitted according to the IGOSS format.
- 4) Salinity samples daily at 0000 hrs GMT from the seawater loop or from a bucket when the loop was no operational.

II. Marine Geochemistry

- 1) Samples for nutrients and tritium were obtained from 6 depths to 500 m. Nutrient and salinity samples were also collected daily at 0000 hrs GMT from the seawater loop. For one 24 hour period, nutrient samples were taken hourly from the loop. Two surface tritium samples were also obtained from surface bottles.
- 2) Alkalinity and total CO<sub>2</sub> samples were taken every 3-4 days from the seawater loop and in addition one deep profile (4200 m) was obtained.



- 3) Air CO<sub>2</sub> samples were taken in quadruplicate at weekly intervals.
- 4) With each deep cast of the physical program (6 in all) duplicate seawater C-13 samples were taken at 2490 m. Two sets of air C-13 samples were taken.
- 5) Two seawater C-14 samples were extracted from 45 gallons of seawater taken from the seawater loop.
- 6) Six 15 litre hydrocarbon samples were obtained.
- 7) Six tarball tows of 15 minutes duration each were completed.

### III. Biological and Productivity

Samples were obtained as follows:

- 1) 5 - 150 metre vertical plankton hauls  
2 - 1200 metre vertical plankton hauls  
7 - Surface plankton tows for 10 minutes in the evening (at sundown).
- 2) During the first and last week on Station P, a bottle cast was made to obtain nitrate and plant pigment profiles. In between, once each week a surface bucket sample was taken for nitrates and pigments.
- 3) A large squid was netted during the first 1200 m vertical haul and preserved.

En route from Station P, only Station 9 was occupied where a 1500 m hydrocast and an STD were made. Salinity, nutrient, nitrate, alkalinity and total CO<sub>2</sub> were taken from the seawater loop at Stations 12 - 7. Salinity samples were also drawn from the loop for half stations 12½ to 7½. Hydrocarbon samples were collected for Stations 12 - 9. The PCO<sub>2</sub> system and the thermosalinograph ran continuously from Station 12 to Station 7. Mechanical BT or XBT's were taken at Line P Stations 12 - 9 including half stations.

### Observations and Other Agencies

- 1) Marine mammal observations were made by the ship's officers for Mr. I. McAskie, Fisheries Research Board of Canada, Pacific Biological Station, Nanaimo, B. C., Canada.
- 2) Bird observations were made by the ship's officers for Dr. M. Myres, University of Alberta, Calgary, Alberta, Canada and Mr. J. Guiguet, Curator of Birds and Mammals, Provincial Museum, Department of Recreation and Conservation, Victoria, British Columbia, Canada.
- 3) Air CO<sub>2</sub> samples weekly in duplicate for Scripps Institution of Oceanography, La Jolla, San Diego, California, U. S. A.

Data was precessed for publication by Ms. M. Sainsbury and Mr. R. Wiegand of Seakem Oceanography Ltd., Victoria, B.C.

### OBSERVATIONAL PROCEDURES

Observations for salinity, oxygen and temperature from all hydrographic casts, including the surface, were obtained with Niskin water sample bottles equipped with either Richter and Wiese and/or Yoshino Keiki Co. reversing thermometers. Two protected thermometers were used on all bottles and one unprotected thermometer was used on each bottle at depths of 300 m or greater. The accuracy of protected reversing thermometers is believed to be  $\pm 0.02^{\circ}\text{C}$ .

The daily surface water temperatures were measured from a bucket sample using a deck thermometer of  $\pm 0.1^{\circ}\text{C}$  accuracy. The daily surface salinity samples were obtained from the seawater loop. When the seawater loop was not operational these samples were obtained with a bucket, and are indicated with a 'b' in this data record.

Salinity determinations were made aboard ship with either an Auto-Lab Model 601 Mark III inductive salinometer or a Hytech Model 6220 lab salinometer. Accuracy using duplicate determinations is estimated to be  $\pm 0.003^{\circ}/\text{oo}$ .

Depth determinations were made using the "depth difference" method described in the U. S. N. Hydrographic Office Publication No. 607 (1955). Depth estimates have an approximate accuracy of  $\pm 5$  m for depths less than 1000 m, and  $\pm 0.5\%$  of depth for depths greater than 1000 m.

The dissolved oxygen analyses were done in the shipboard laboratory by a modified Winkler method (Carpenter, 1955).

Line P engine intake continuous temperatures on both ships were recorded by a Honeywell "Elektronik 15" Recorder. The temperature probe is at a depth of approximately 3 metres below the sea surface and the instrument accuracy is believed to be  $\pm 0.1^{\circ}\text{C}$ .

Each ship is equipped with a Plessey Model 6600-T thermosalinograph which is used, on Line P, for continuous recording of surface temperatures and salinities from ship's seawater loop. The temperature probe is mounted at the seawater loop intake (approximately 3 metres below the surface) and the salinity probe and recorder are situated in the dry lab. The accuracy of this instrument is believed to be  $\pm 0.1^{\circ}\text{C}$  for temperature and  $\pm 0.1^{\circ}/\text{oo}$  for salinity.

STP profiles were taken with a Plessey Model 9006 STP system.

### COMPUTATIONS

All hydrographic data were processed with the aid of an IBM 370 computer. Reversing thermometer temperature corrections, thermometric

depth calculations, and accepted depth from the "depth difference" method are computed. Extraneous thermometric depths caused by thermometer malfunctions are automatically edited and replaced. A Calcomp 565 Offline Plotter was used to plot temperature-salinity and temperature-oxygen diagrams, as well as plots of temperature, salinity, and dissolved oxygen vs  $\log_{10}$  depth. These plots were used to check the data for errors.

Missing hydrographic data were obtained using a weighted parabolas interpolation method (Reiniger and Ross, 1968). These data are indicated with an asterisk in this data record.

Data values which we suspect but which we have included in this data record are indicated with a plus. These data have been removed from punch card and magnetic tape records.

Analog records from the salinity-temperature-pressure instrument have been machine digitized, then replotted using the Calcomp plotter.

Digitization was continued until original and computer plotted traces were coincident. Temperature and salinity values were listed at standard pressures; integrals (depths, geopotential anomaly, and potential energy anomaly) were computed from the entire array of digitized data.

The headings for the data listings are explained as follows:

PRESS	is pressure (decibars)
TEMP	is temperature (degrees Celsius)
SAL	is salinity (parts per thousand)
DEPTH	is reported in metres
SIGMA-T	is specific gravity anomaly
SVA	is specific volume anomaly
THETA	is potential temperature (degrees Celsius)
SVA (THETA)	is potential specific volume anomaly
DELTA D	is geopotential anomaly (J/kg)
POT EN	is potential energy in units of $10^8$ ergs/cm <sup>2</sup>
OXY	is the concentration of dissolved oxygen expressed in millilitres per litre
B-V PERIOD	is the Brunt-Vaisala period in minutes

#### REFERENCES

- Carpenter, J.H., 1965. The Chesapeake Bay Institute technique for the Winkler dissolved oxygen method. *Limnol. and Oceanogr.* 10: 141-143.
- Collins, C.A., R.L. Tripe, D.A. Healey and J. Joergensen, 1969. The time distribution of serial oceanographic data from the Ocean Station P programme. *Fish. Res. Bd. Can. Tech. Rept. No.* 106.
- Reiniger, R.F. and C.K. Ross, 1968. A method of interpolation with application to oceanographic data. *Deep Sea Res.*, 15: 185-193.



U. S. N. Hydrographic Office, 1955. Instruction Manual for oceanographic observations, Publ. No. 607.

LIST OF FIGURES

- Figure 1. Chart showing Line P station positions.
- Figure 2. Composite plot of temperature vs.  $\log_{10}$  depth for Line P stations. P-76-1
- Figure 3. Composite plot of salinity vs.  $\log_{10}$  depth for Line P stations. P-76-1
- Figure 4. Composite plot of temperature vs.  $\log_{10}$  depth for Station P. P-76-1
- Figure 5. Composite plot of salinity vs.  $\log_{10}$  depth for Station P. P-76-1
- Figure 6. Composite plot of oxygen vs.  $\log_{10}$  depth for Station P. P-76-1
- Figure 7. Salinity differences between hydro data and STP. P-76-1
- Figure 8. Temperature difference between hydro data and STP. P-76-1

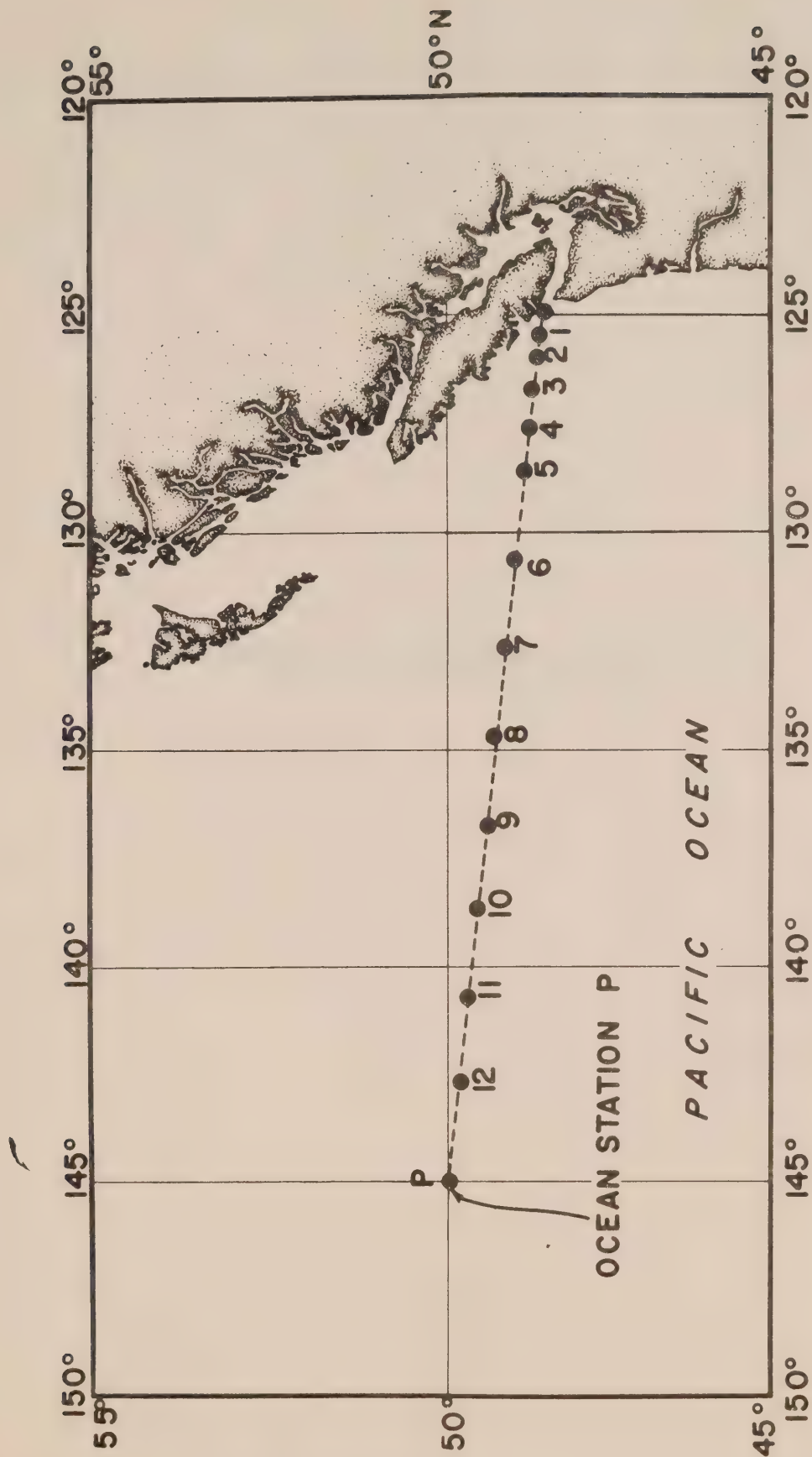


Fig. 1 Chart showing Line P station positions.





Oceanographic Data Obtained on Cruise P-76-1  
(CODC Reference No. 15-76-001)



Results of Hydrographic Observations  
(P-76-1)



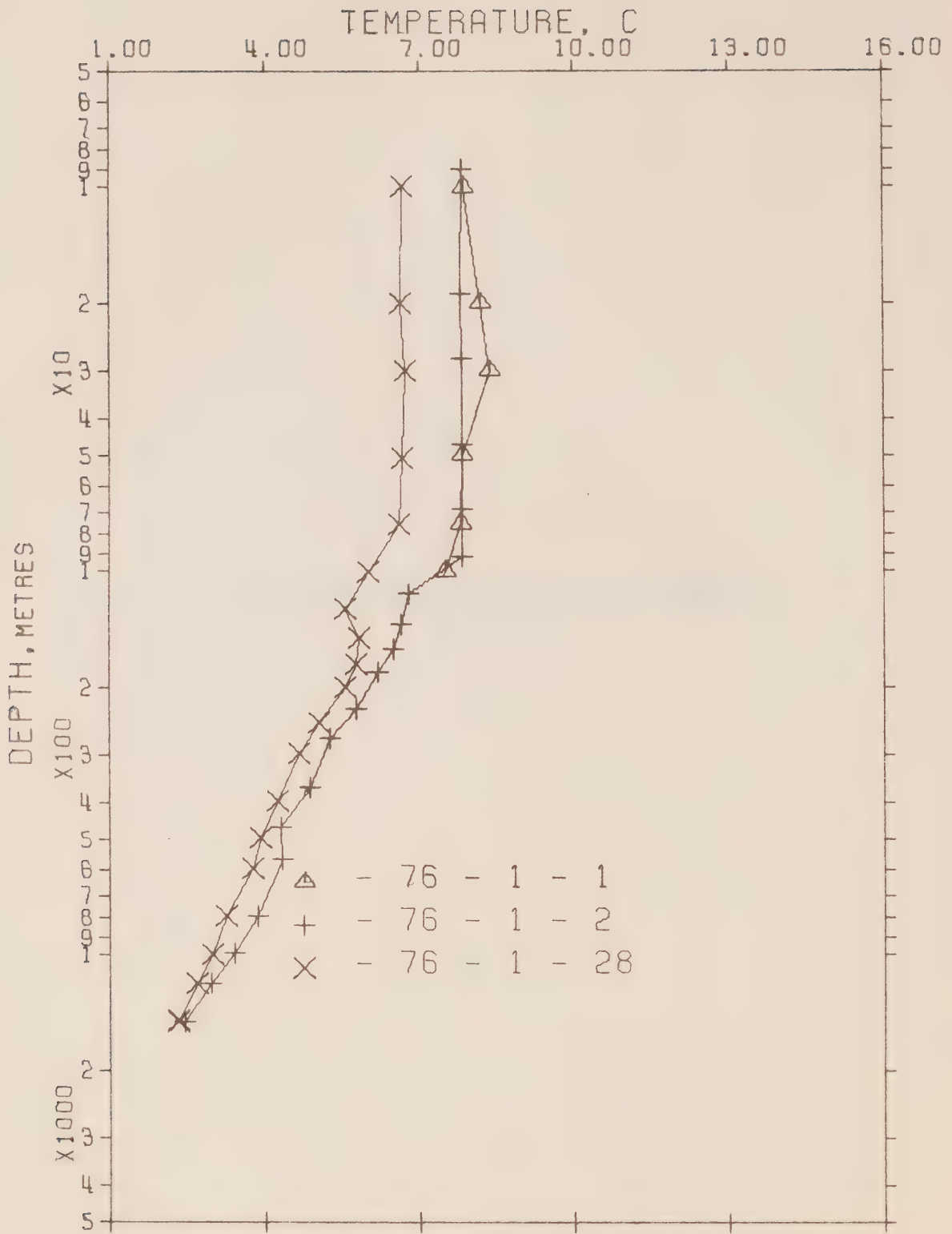


Figure 2. Composite plot of temperature vs.  $\log_{10}$  depth for Line P stations.  
P-76-1

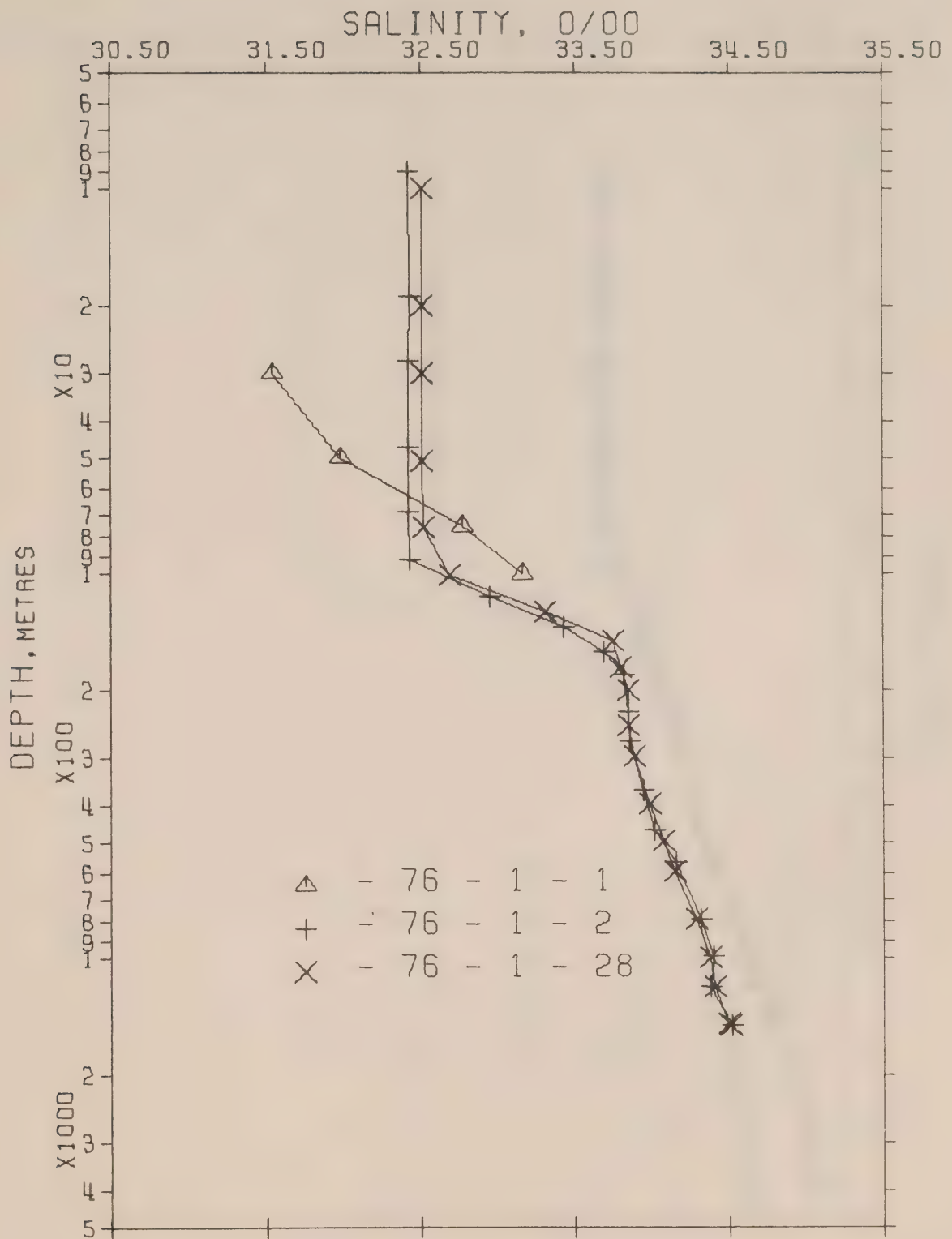


Figure 3. Composite plot of salinity vs.  $\log_{10}$  depth for Line P stations.  
P-76-1

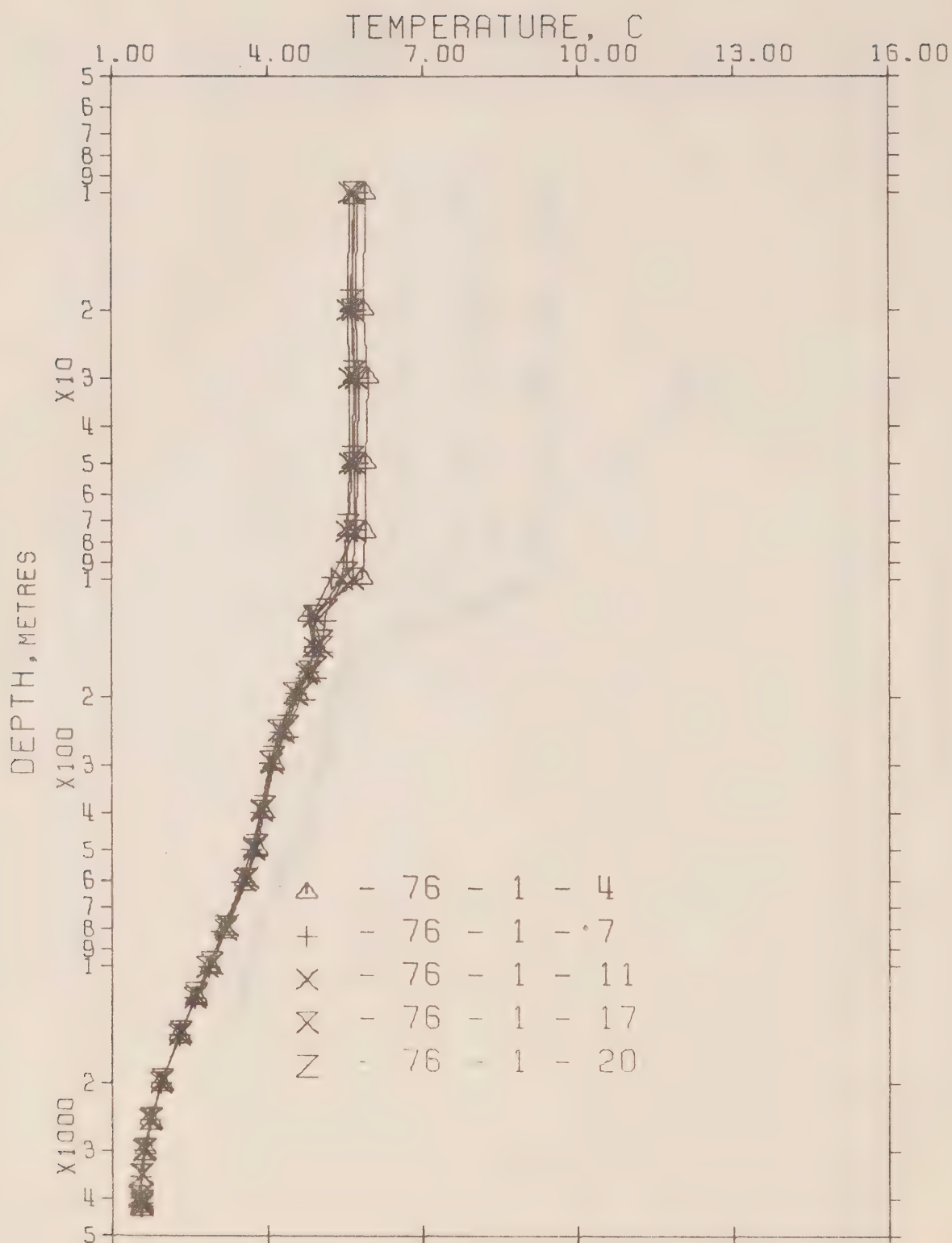


Figure 4. Composite plot of temperature vs.  $\log_{10}$  depth for station P. P-76-1



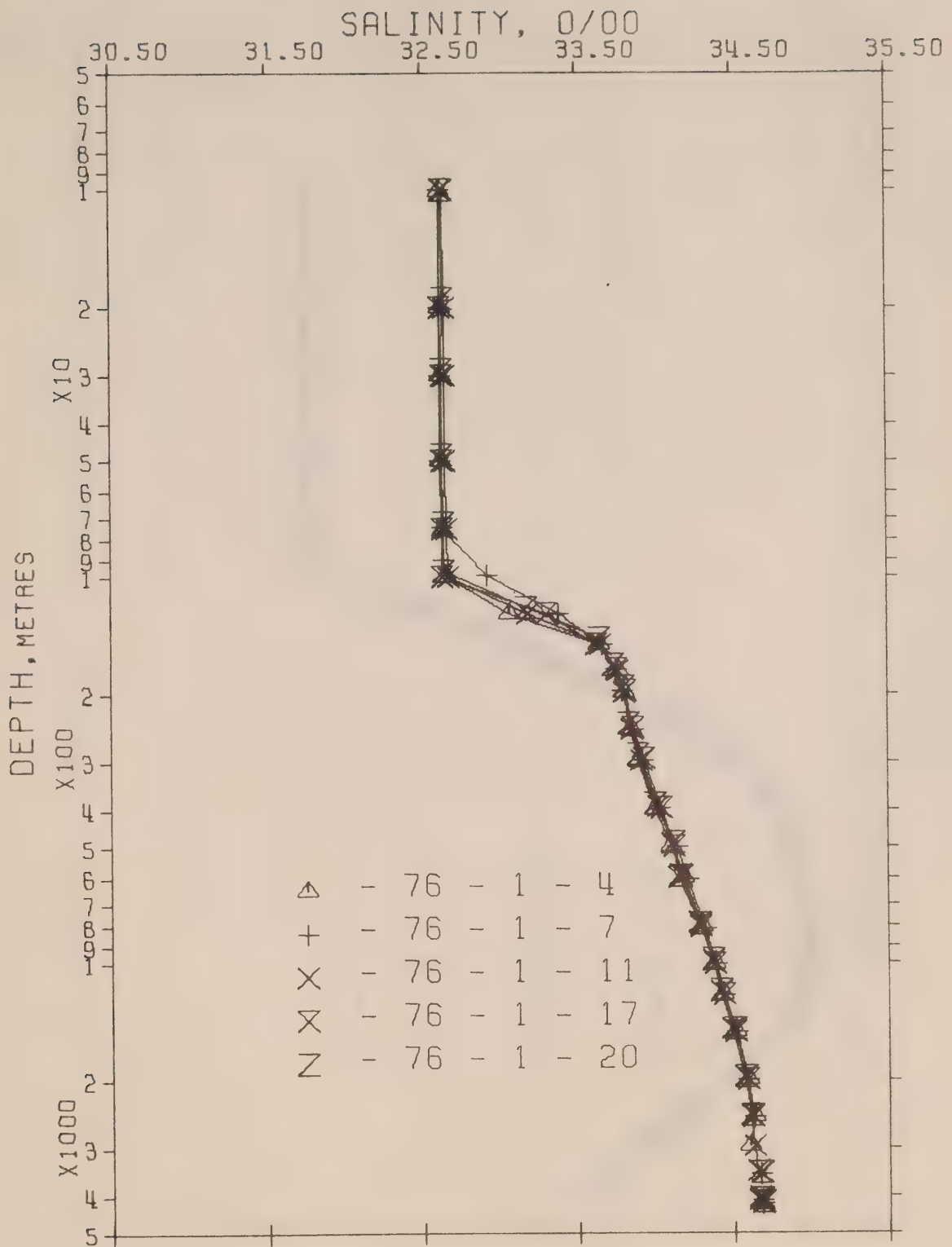


Figure 5. Composite plot of salinity vs.  $\log_{10}$  depth for station P. P-76-1

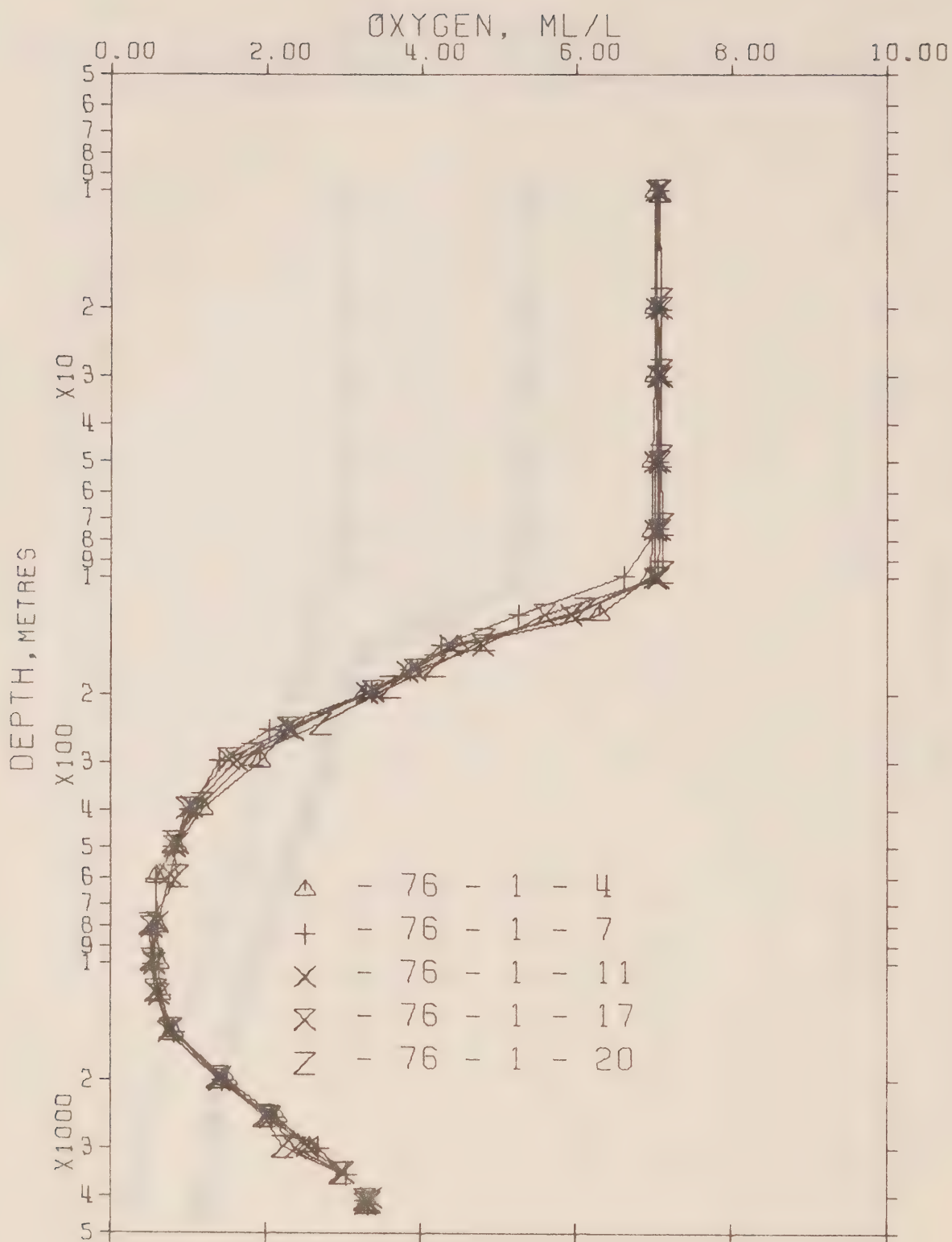
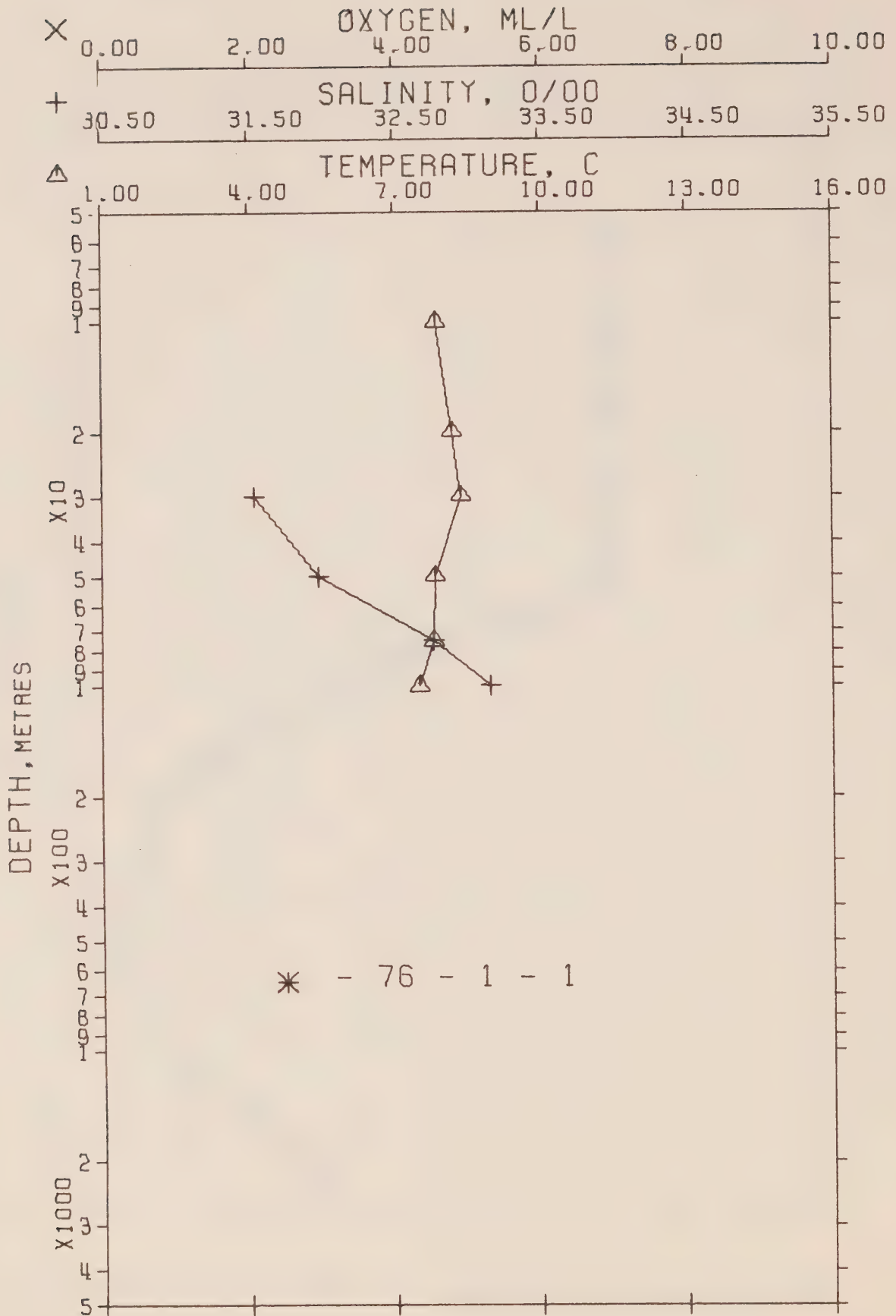


Figure 6. Composite plot oxygen vs.  $\log_{10}$  depth for station P. P-76-1







## OFFSHORE OCEANOGRAPHY GROUP

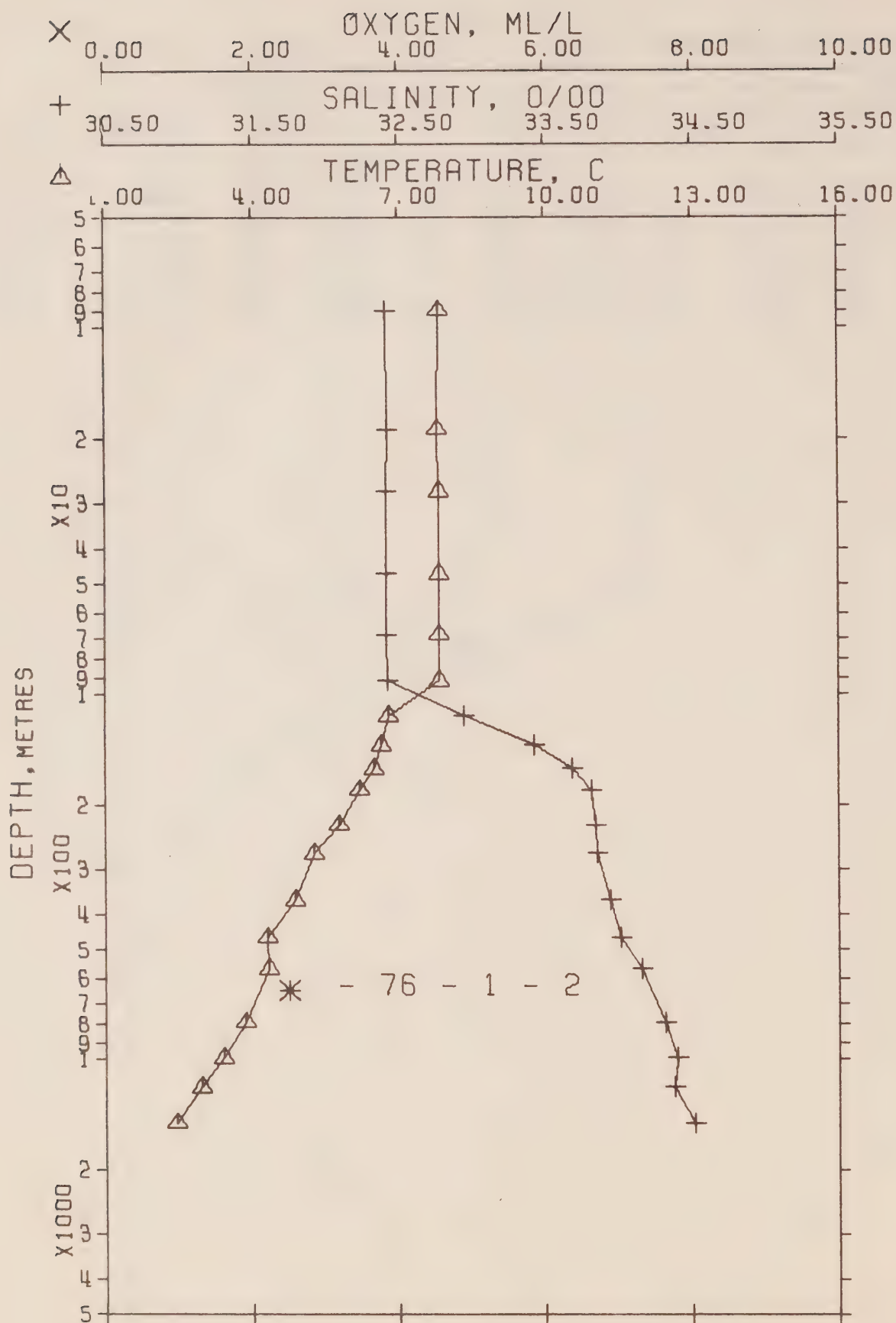
REFERENCE NO. 76- 1- 1 DATE 10/ 1/76 GMT 9.0

POSITION 48-38.0 N, 126- 0.0 W

STATION 2

## HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND,
0	7.85	30.388	0	23.705	420.3	7.85	420.1	0.0	0.0		1476.
10	7.87	30.423	10	23.730	418.1	7.87	417.8	0.42	0.02		1477.
20	8.19	31.119	20	24.229	370.7	8.19	370.1	0.82	0.08		1479.
30	8.37	31.538	30	24.531	342.0	8.37	341.4	1.18	0.17		1480.
50	7.83	31.982	50	24.956	301.8	7.83	300.9	1.82	0.44		1479.
75	7.80	32.767	75	25.575	243.3	7.79	241.9	2.51	0.87		1480.
100*	7.53	33.157	100	25.920	210.9	7.52	209.1	3.06	1.37		1480.
101	7.52	33.165	100	25.927	210.3	7.51	208.4	3.07	1.38		1480.



## OFFSHORE OCEANOGRAPHY GROUP

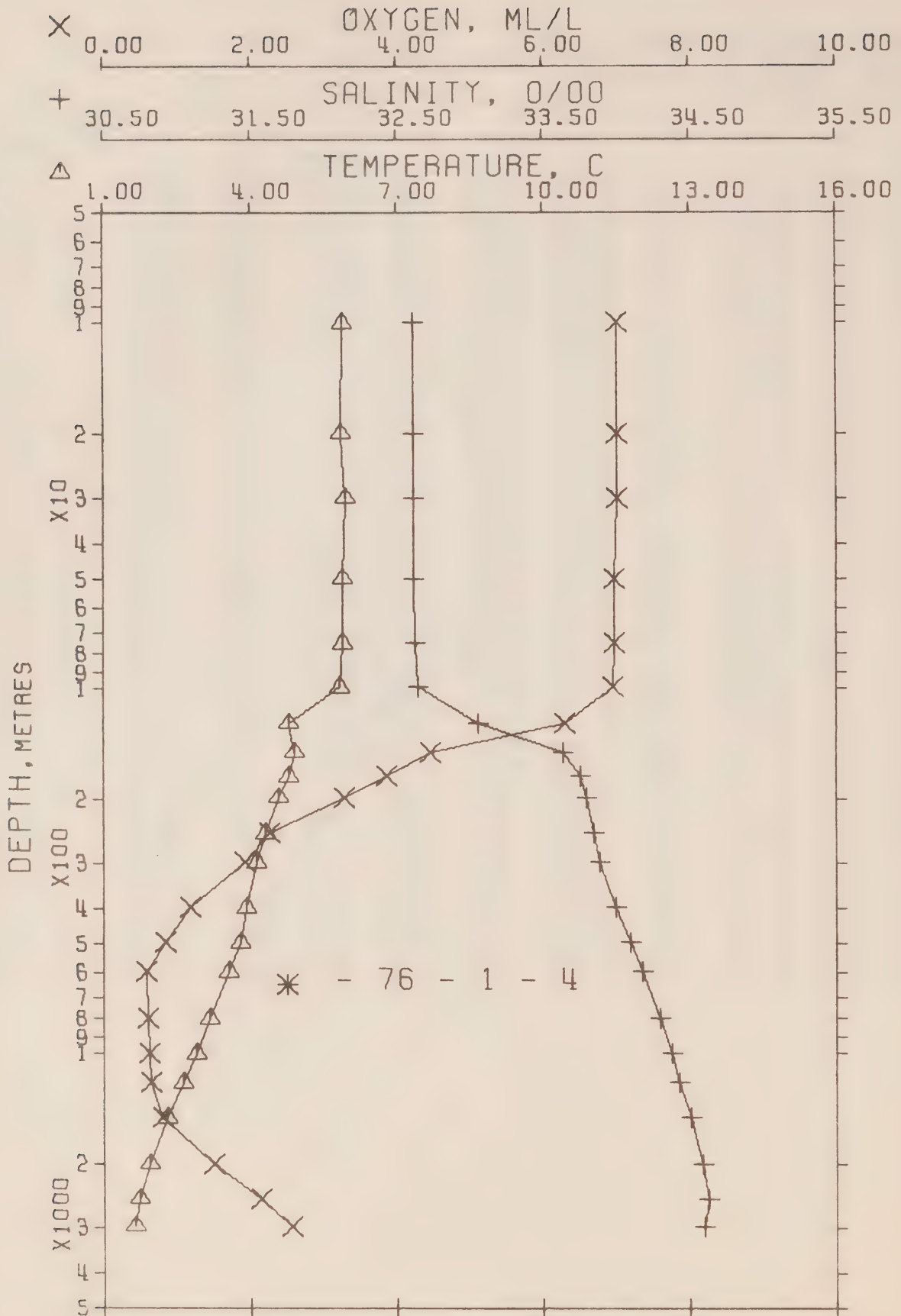
REFERENCE NO. 76- 1- 2 DATE 10/ 1/76 GMT 18.4

POSITION 48-51.0 N 128-40.0 W

STATION 5

## HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	DOXY	SOUND
0	7.87	32.423	0	25.296	268.8	7.87	268.6	0.0	0.0		1479.
9	7.85	32.424	9	25.299	268.6	7.85	268.2	0.24	0.01		1479.
10*	7.84	32.424	10	25.300	268.5	7.84	268.1	0.27	0.01		1479.
19	7.81	32.426	19	25.307	268.1	7.81	267.5	0.51	0.05		1479.
20*	7.81	32.426	20	25.306	268.2	7.81	267.6	0.54	0.05		1479.
28	7.85	32.424	28	25.299	268.8	7.85	268.2	0.76	0.11		1479.
30*	7.85	32.424	30	25.299	268.9	7.85	268.2	0.81	0.12		1479.
47	7.84	32.420	47	25.298	269.3	7.84	268.3	1.27	0.31		1480.
50*	7.84	32.420	50	25.298	269.3	7.84	268.3	1.34	0.34		1480.
69	7.85	32.423	69	25.299	269.5	7.84	268.2	1.87	0.66		1480.
75*	7.85	32.426	75	25.301	269.4	7.84	268.0	2.02	0.77		1480.
93	7.85	32.433	92	25.306	269.1	7.84	267.4	2.50	1.13		1481.
100*	7.49	32.613	100	25.498	250.9	7.48	249.2	2.69	1.37		1479.
116	6.80	32.951	115	25.859	216.9	6.79	215.0	3.06	1.77		1477.
125*	6.73	33.156	125	26.027	200.9	6.72	198.9	3.25	2.01		1478.
139	6.64	33.434	138	26.259	179.1	6.63	176.9	3.51	2.37		1478.
150*	6.56	33.568	149	26.375	168.3	6.55	165.9	3.71	2.65		1478.
161	6.49	33.692	160	26.482	159.3	6.48	155.8	3.89	2.93		1478.
175*	6.31	33.772	174	26.568	150.2	6.30	147.5	4.10	3.30		1473.
184	6.20	33.821	183	26.621	145.4	6.19	142.5	4.24	3.55		1477.
200*	6.04	33.831	200	26.649	142.8	6.03	139.9	4.46	4.00		1477.
225*	5.82	33.846	224	26.688	139.3	5.80	136.1	4.82	4.76		1476.
230	5.78	33.848	228	26.695	138.7	5.76	135.5	4.88	4.91		1476.
250*	5.53	33.856	249	26.731	135.4	5.51	132.0	5.16	5.59		1476.
275	5.26	33.865	273	26.771	131.7	5.24	128.2	5.49	6.48		1475.
300*	5.14	33.890	301	26.804	128.8	5.12	125.0	5.82	7.44		1475.
369	4.86	33.949	366	26.883	121.9	4.83	117.5	6.68	10.38		1475.
400*	4.67	33.975	400	26.925	118.1	4.64	113.5	7.06	11.85		1475.
467	4.30	34.023	463	27.003	111.0	4.26	106.1	7.82	15.21		1474.
500*	4.31	34.070	498	27.040	107.8	4.27	102.6	8.18	17.01		1475.
571	4.32	34.160	566	27.110	101.9	4.28	95.9	8.92	21.05		1476.
600*	4.25	34.183	600	27.136	99.7	4.20	93.4	9.22	22.81		1477.
700*	4.03	34.256	703	27.216	92.7	3.98	85.7	10.18	29.18		1477.
798	3.85	34.317	791	27.283	86.9	3.79	79.3	11.06	35.88		1478.
800*	3.85	34.318	793	27.284	86.8	3.79	79.2	11.07	36.02		1478.
900*	3.61	34.362	897	27.343	81.6	3.54	73.6	11.92	43.31		1479.
1000*	3.39	34.401	991	27.395	76.9	3.32	68.6	12.70	50.92		1480.
1001	3.39	34.402	992	27.396	76.9	3.32	68.5	12.71	51.04		1480.
1200*	2.96	34.380	1188	27.419	74.9	2.88	66.2	14.22	67.96		1481.
1205	2.95	34.380	1193	27.420	74.9	2.87	66.2	14.26	68.42		1481.
1500*	2.45	34.514	1485	27.571	60.9	2.34	51.9	16.31	96.60		1484.
1510	2.43	34.518	1494	27.575	60.5	2.33	51.4	16.37	97.56		1484.





## OFFSHORE OCEANOGRAPHY GROUP

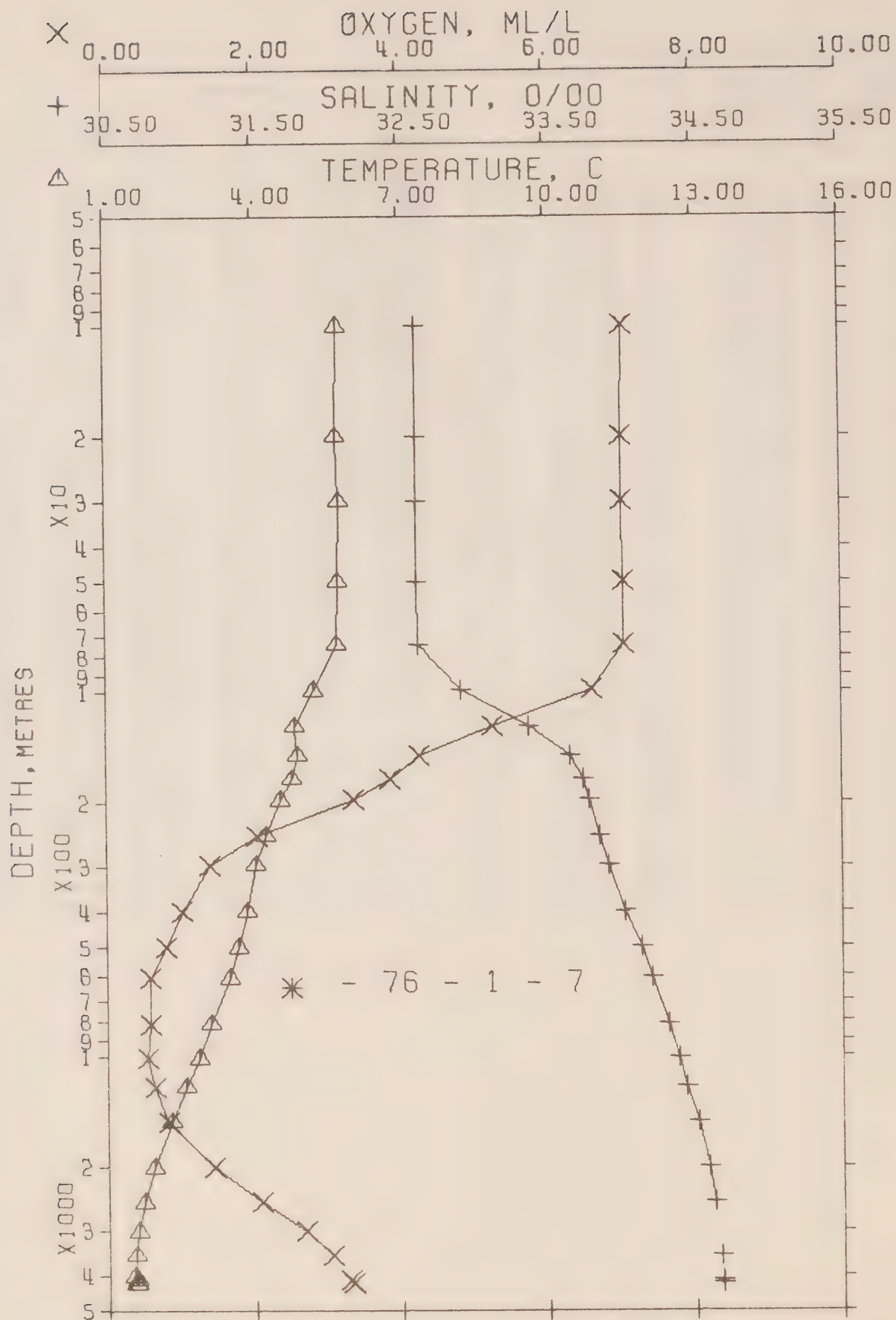
REFERENCE NO. 76- 1- 4 DATE 16/ 1/76 GMT 18.4

POSITION 50- 0.0 N, 145- 0.0 W

STATION P

## HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	5.91	32.619	0	25.709	229.4	5.91	229.2	0.0	0.0	7.03	1472.
10	5.89	32.620	10	25.713	229.3	5.89	228.9	0.23	0.01	7.02	1472.
20	5.86	32.621	20	25.717	228.9	5.86	228.5	0.46	0.05	7.01	1472.
30	5.95	32.620	30	25.705	230.2	5.95	229.6	0.69	0.11	7.01	1472.
50	5.89	32.622	50	25.714	229.5	5.89	228.8	1.16	0.30	6.99	1472.
75	5.88	32.629	75	25.721	229.2	5.87	228.0	1.73	0.67	6.98	1473.
100	5.83	32.654	99	25.747	227.0	5.82	225.6	2.29	1.17	6.96	1473.
125	4.79	33.062	124	26.189	185.1	4.78	183.6	2.81	1.76	6.29	1470.
150	4.91	33.642	149	26.634	143.1	4.90	141.3	3.22	2.33	4.45	1471.
175	4.79	33.762	174	26.743	133.1	4.78	131.0	3.57	2.90	3.86	1471.
200	4.58	33.802	199	26.798	128.0	4.56	125.7	3.89	3.53	3.29	1471.
225*	4.43	33.825	225	26.832	124.9	4.41	122.5	4.20	4.20	2.76	1471.
250*	4.29	33.845	248	26.863	122.2	4.28	119.6	4.51	4.95	2.27	1471.
251	4.29	33.846	249	26.864	122.1	4.27	119.5	4.52	4.98	2.25	1471.
300*	4.11	33.893	293	26.919	117.2	4.09	114.1	5.11	6.63	1.93	1471.
301	4.11	33.894	299	26.921	117.0	4.09	114.0	5.13	6.68	1.92	1471.
400*	3.91	33.996	397	27.022	108.2	3.88	104.4	6.23	10.63	1.19	1472.
401	3.91	33.997	398	27.023	108.1	3.88	104.3	6.24	10.68	1.18	1472.
500*	3.78	34.097	496	27.115	100.0	3.75	95.4	7.27	15.40	0.84	1473.
501	3.78	34.098	497	27.116	100.0	3.74	95.3	7.28	15.46	0.84	1473.
600*	3.55	34.182	595	27.206	92.0	3.51	86.8	8.23	20.79	0.59	1474.
601	3.55	34.183	596	27.206	91.9	3.51	86.7	8.24	20.85	0.58	1474.
700*	3.35	34.241	701	27.271	86.3	3.31	80.5	9.12	26.67	0.59	1475.
800*	3.18	34.292	794	27.328	81.4	3.13	75.1	9.96	33.07	0.59	1476.
808	3.17	34.296	801	27.333	81.0	3.11	74.7	10.03	33.63	0.59	1476.
900*	3.03	34.335	897	27.377	77.2	2.97	70.5	10.75	39.93	0.61	1477.
1000*	2.89	34.373	991	27.420	73.5	2.82	66.4	11.50	47.22	0.62	1478.
1010	2.88	34.377	1000	27.424	73.1	2.81	66.0	11.57	47.95	0.62	1478.
1200*	2.63	34.427	1189	27.485	67.8	2.55	60.1	12.91	63.02	0.64	1480.
1212	2.62	34.430	1200	27.489	67.5	2.54	59.7	13.00	64.05	0.64	1480.
1500*	2.32	34.503	1485	27.572	60.3	2.22	51.7	14.83	89.37	0.79	1484.
1520	2.30	34.507	1503	27.577	59.8	2.20	51.2	14.95	91.19	0.79	1484.
2000*	1.94	34.584	1980	27.668	52.0	1.80	42.4	17.62	139.13	1.45	1490.
2033	1.92	34.589	2008	27.673	51.5	1.78	41.9	17.79	142.63	1.49	1491.
2500*	1.72	34.629	2470	27.720	47.9	1.55	37.2	20.09	195.85	2.09	1498.
2539	1.71	34.632	2505	27.724	47.5	1.53	36.9	20.27	200.64	2.14	1499.
3000*	1.62	34.604	2959	27.707	49.9	1.40	38.1	22.49	263.26	2.53	1506.
3029	1.62	34.602	2985	27.706	50.0	1.40	38.2	22.64	267.73	2.56	1506.



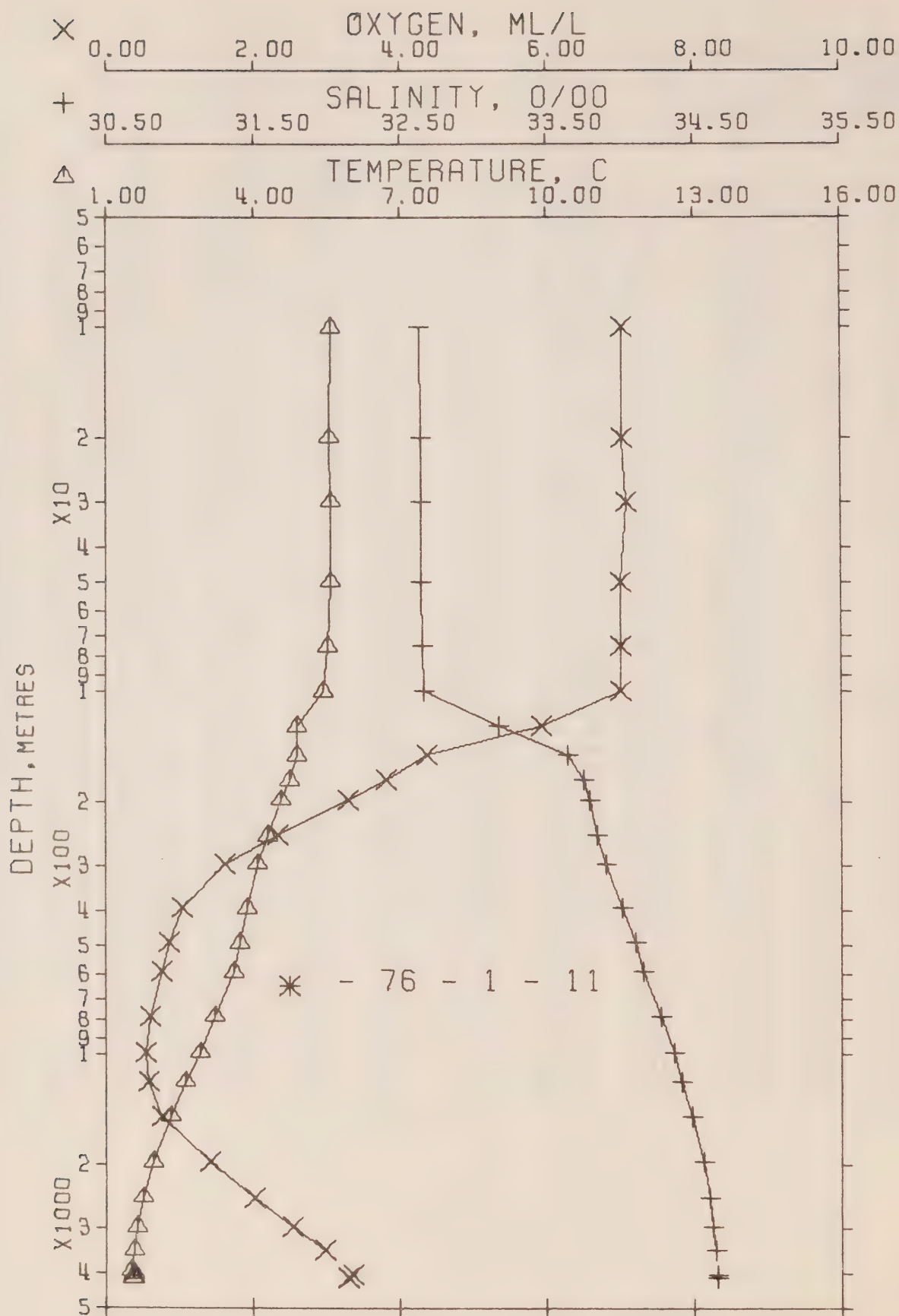
## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 1- 7 DATE 23/ 1/76 GMT 17.8

POSITION 50- 0.0 N, 145- 0.0 W STATION P

## HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OPY	SOUND
0	5.76	32.625	0	25.732	227.3	5.76	227.0	0.0	0.0	7.06	1471.
10	5.73	32.625	10	25.736	227.1	5.73	226.8	0.23	0.01	7.06	1471.
20	5.71	32.622	20	25.736	227.2	5.71	226.7	0.46	0.05	7.04	1471.
30	5.78	32.624	30	25.729	227.9	5.78	227.3	0.69	0.11	7.04	1472.
50	5.73	32.623	50	25.734	227.6	5.73	226.9	1.14	0.29	7.05	1472.
74	5.70	32.632	74	25.745	226.8	5.69	225.8	1.70	0.65	7.06	1472.
75*	5.69	32.639	75	25.752	226.2	5.68	225.1	1.71	0.66	7.05	1472.
100	5.23	32.923	99	26.029	200.1	5.22	198.8	2.24	1.13	6.63	1471.
125	4.85	33.384	124	26.437	161.5	4.84	160.0	2.69	1.65	5.27	1470.
150	4.90	33.662	149	26.651	141.6	4.89	139.6	3.07	2.17	4.26	1471.
174	4.79	33.755	173	26.737	133.6	4.78	131.5	3.40	2.72	3.86	1471.
175*	4.78	33.756	174	26.739	133.4	4.77	131.3	3.41	2.74	3.85	1471.
199	4.54	33.793	198	26.795	128.3	4.53	126.0	3.73	3.35	3.36	1471.
200*	4.54	33.794	199	26.796	128.2	4.52	125.9	3.74	3.36	3.34	1471.
225*	4.37	33.830	225	26.842	123.9	4.36	121.5	4.05	4.05	2.66	1471.
250	4.23	33.863	248	26.883	120.2	4.21	117.6	4.36	4.78	2.05	1470.
300	4.03	33.925	298	26.953	113.9	4.01	110.9	4.95	6.43	1.40	1470.
400*	3.86	34.031	397	27.055	105.1	3.83	101.3	6.03	10.31	1.03	1472.
402	3.86	34.033	399	27.057	104.9	3.83	101.1	6.06	10.41	1.02	1472.
500*	3.69	34.133	496	27.153	96.4	3.65	91.9	7.04	14.93	0.81	1473.
506	3.68	34.139	502	27.159	95.9	3.64	91.4	7.10	15.23	0.80	1473.
600*	3.50	34.207	596	27.230	89.7	3.46	84.5	7.97	20.14	0.60	1473.
612	3.48	34.215	607	27.239	89.0	3.44	83.7	8.08	20.82	0.57	1474.
700*	3.31	34.262	701	27.292	84.3	3.26	78.6	8.84	25.89	0.58	1474.
800*	3.14	34.308	795	27.345	79.7	3.08	73.6	9.66	32.15	0.58	1475.
819	3.11	34.316	811	27.354	78.9	3.05	72.6	9.80	33.36	0.58	1476.
900*	3.00	34.347	897	27.389	75.9	2.94	69.3	10.43	38.89	0.57	1476.
1000*	2.87	34.382	992	27.428	72.6	2.80	65.5	11.18	46.07	0.55	1478.
1018	2.85	34.388	1008	27.435	72.1	2.78	64.9	11.31	47.41	0.55	1478.
1200*	2.60	34.437	1189	27.496	66.7	2.52	59.0	12.57	61.67	0.64	1480.
1219	2.58	34.442	1206	27.502	66.2	2.50	58.5	12.69	63.19	0.65	1480.
1500*	2.30	34.511	1486	27.581	59.4	2.20	50.9	14.46	87.64	0.80	1484.
1522	2.28	34.516	1505	27.586	58.9	2.18	50.4	14.59	89.63	0.81	1484.
2000*	1.94	34.586	1980	27.669	51.9	1.80	42.3	17.20	136.67	1.41	1490.
2034	1.92	34.590	2009	27.674	51.4	1.78	41.8	17.38	140.27	1.44	1491.
2500*	1.74	34.623	2471	27.714	48.5	1.56	37.8	19.69	193.72	2.03	1498.
2549	1.72	34.626	2515	27.718	48.2	1.54	37.4	19.93	199.86	2.08	1499.
3000*	1.61	34.649	2961	27.744	46.6	1.39	34.7	22.06	260.10	2.61	1506.
3065	1.60	34.652	3020	27.748	46.3	1.37	34.4	22.36	269.42	2.68	1507.
3500*	1.56	34.670	3450	27.765	45.6	1.29	32.4	24.35	336.12	3.00	1514.
3579	1.55	34.673	3522	27.768	45.5	1.27	32.0	24.71	349.03	3.05	1516.
4000*	1.52	34.678	3938	27.775	45.7	1.19	31.1	26.63	423.15	3.22	1523.
4087	1.51	34.679	4018	27.776	45.8	1.18	31.0	27.03	439.54		1524.
4100*	1.52	34.679	4031	27.776	46.0	1.18	31.0	27.09	442.01		1524.
4188	1.58	34.680	4116	27.772	47.2	1.23	31.3	27.50	459.37	3.28	1526.
4200*	1.57	34.681	4128	27.773	47.1	1.23	31.2	27.55	461.84	3.29	1526.
4278	1.54	34.684	4204	27.778	46.5	1.18	30.6	27.92	477.49	3.31	1528.
4288	1.56	34.684	4214	27.777	46.9	1.20	30.7	27.97	479.58	3.32	1528.





## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 1- 11

DATE 31/ 1/76

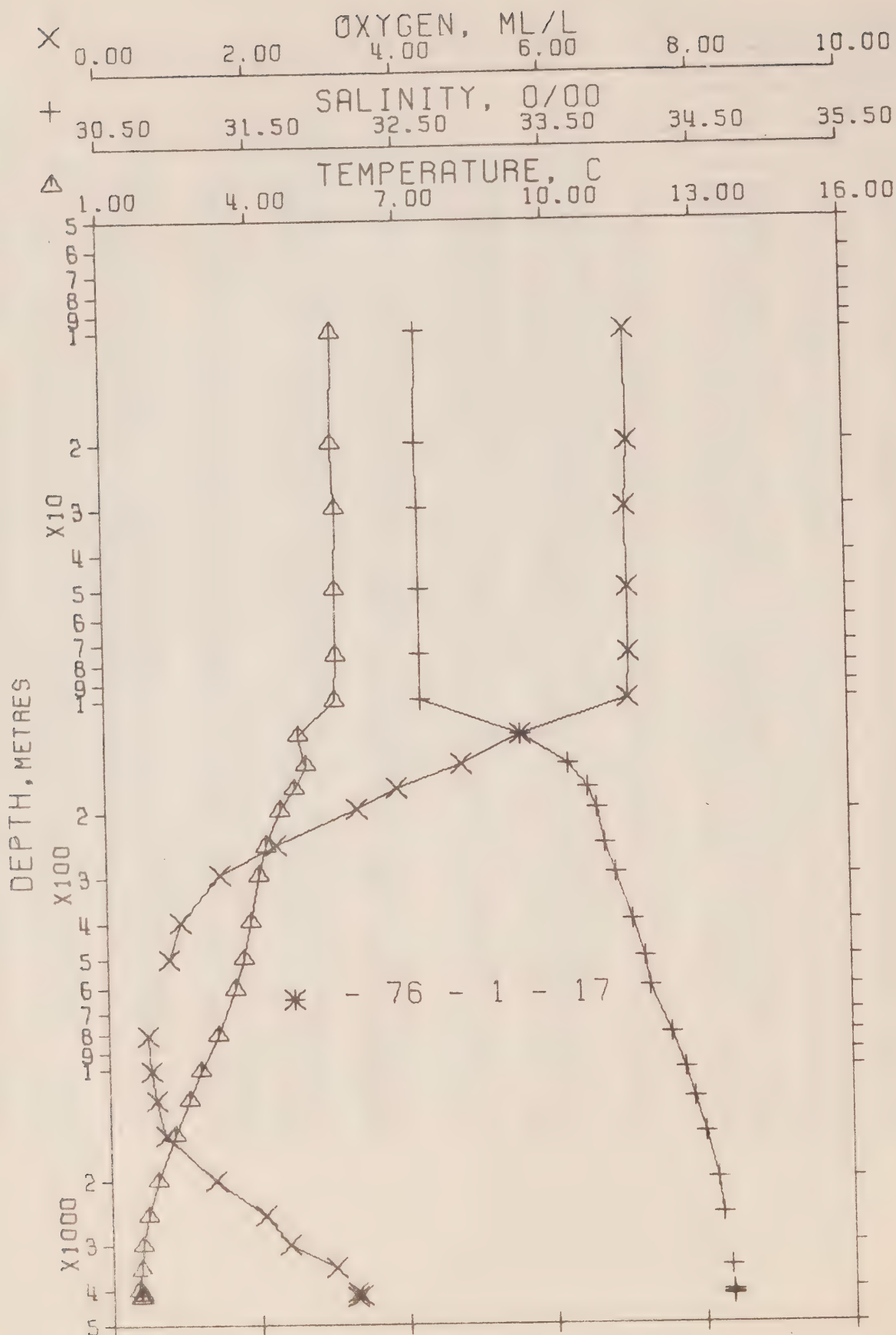
GMT 18.0

POSITION 50- 0.0 N, 145- 0.0 W

STATION P

## HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	5.61	32.644	0	25.765	224.2	5.61	224.0	0.0	0.0	7.04	1470.
10	5.59	32.643	10	25.767	224.1	5.59	223.8	0.23	0.01	7.05	1470.
20	5.57	32.649	20	25.774	223.6	5.57	223.1	0.45	0.05	7.04	1471.
30	5.59	32.646	30	25.769	224.1	5.59	223.6	0.68	0.10	7.11	1471.
50	5.59	32.649	50	25.771	224.1	5.59	223.3	1.13	0.29	7.03	1471.
75	5.52	32.659	75	25.787	222.8	5.51	221.8	1.69	0.65	7.01	1471.
100*	5.45	32.672	99	25.805	221.4	5.44	220.1	2.23	1.14	7.02	1471.
101	5.45	32.672	100	25.806	221.3	5.44	220.0	2.25	1.15	7.02	1471.
125*	4.91	33.161	124	26.254	178.9	4.90	177.4	2.75	1.72	5.97	1470.
126	4.89	33.176	125	26.268	177.6	4.88	176.1	2.76	1.74	5.94	1470.
150*	4.91	33.632	149	26.627	143.8	4.90	142.0	3.15	2.28	4.44	1471.
151	4.91	33.650	150	26.641	142.6	4.90	140.6	3.16	2.31	4.38	1471.
175*	4.77	33.758	174	26.742	133.1	4.75	131.1	3.49	2.85	3.84	1471.
176	4.76	33.763	175	26.747	132.7	4.75	130.6	3.50	2.88	3.82	1471.
200	4.57	33.804	199	26.800	127.8	4.55	125.5	3.82	3.48	3.29	1471.
225*	4.43	33.826	225	26.833	124.9	4.41	122.4	4.13	4.15	2.80	1471.
250*	4.29	33.846	248	26.863	122.1	4.28	119.5	4.44	4.90	2.35	1471.
251	4.29	33.847	249	26.864	122.0	4.27	119.4	4.45	4.92	2.34	1471.
300	4.08	33.906	298	26.933	115.8	4.06	112.9	5.03	6.58	1.63	1471.
398	3.89	34.022	395	27.045	106.0	3.86	102.2	6.12	10.43	1.05	1472.
400*	3.89	34.024	397	27.047	105.8	3.86	102.0	6.14	10.51	1.04	1472.
497	3.74	34.112	493	27.131	98.4	3.70	94.0	7.12	15.01	0.86	1473.
500*	3.74	34.113	496	27.133	98.4	3.70	93.8	7.15	15.15	0.86	1473.
597	3.62	34.159	592	27.181	94.5	3.58	99.2	8.09	20.43	0.77	1474.
600*	3.61	34.161	595	27.183	94.2	3.57	99.0	8.12	20.60	0.77	1474.
700*	3.39	34.228	701	27.257	87.7	3.34	81.9	9.03	26.60	0.67	1475.
792	3.21	34.281	785	27.317	82.4	3.16	76.2	9.81	32.56	0.59	1476.
800*	3.20	34.285	794	27.321	82.0	3.14	75.8	9.87	33.08	0.59	1476.
900*	3.04	34.329	897	27.370	77.8	2.98	71.1	10.67	39.99	0.56	1477.
995	2.91	34.366	985	27.412	74.2	2.84	67.0	11.39	46.92	0.53	1478.
1000*	2.90	34.368	991	27.414	74.0	2.83	66.9	11.43	47.33	0.54	1478.
1196	2.63	34.425	1184	27.484	67.9	2.55	60.2	12.83	63.00	0.57	1480.
1200*	2.63	34.426	1188	27.485	67.8	2.54	60.1	12.85	63.31	0.58	1480.
1498	2.33	34.493	1482	27.564	61.1	2.23	52.5	14.72	89.03	0.75	1484.
1500*	2.33	34.493	1484	27.564	61.1	2.23	52.5	14.73	89.18	0.76	1484.
2000*	1.96	34.573	1976	27.657	53.1	1.82	43.5	17.60	140.02	1.41	1491.
2003	1.96	34.573	1979	27.657	53.1	1.82	43.4	17.62	140.39	1.41	1491.
2500*	1.75	34.614	2468	27.707	49.2	1.57	38.5	20.17	198.93	2.00	1498.
2514	1.74	34.615	2480	27.708	49.1	1.56	38.4	20.24	200.65	2.02	1498.
3000*	1.63	34.633	2959	27.731	47.8	1.41	36.0	22.59	266.82	2.51	1506.
3036	1.62	34.634	2992	27.732	47.7	1.39	35.8	22.77	272.15	2.55	1507.
3500*	1.56	34.653	3446	27.752	46.9	1.29	33.6	24.96	345.24	2.97	1514.
3517	1.56	34.654	3462	27.753	46.9	1.29	33.5	25.04	348.10	2.98	1515.
4000*	1.51	34.659	3934	27.760	47.0	1.19	32.5	27.29	434.47	3.30	1523.
4011	1.51	34.659	3944	27.760	47.1	1.19	32.5	27.35	436.60		1523.
4100*	1.56	34.660	4031	27.757	48.1	1.23	32.7	27.77	454.03		1525.
4111	1.57	34.660	4041	27.757	48.2	1.23	32.7	27.82	456.17	3.37	1525.
4199	1.54	34.662	4127	27.760	47.8	1.19	32.4	28.24	474.07	3.30	1526.
4200*	1.54	34.662	4128	27.760	47.9	1.20	32.4	28.25	474.29	3.30	1526.
4209	1.56	34.662	4137	27.759	48.1	1.21	32.5	28.29	476.19	3.30	1527.



## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 1- 17

DATE 5/ 2/76

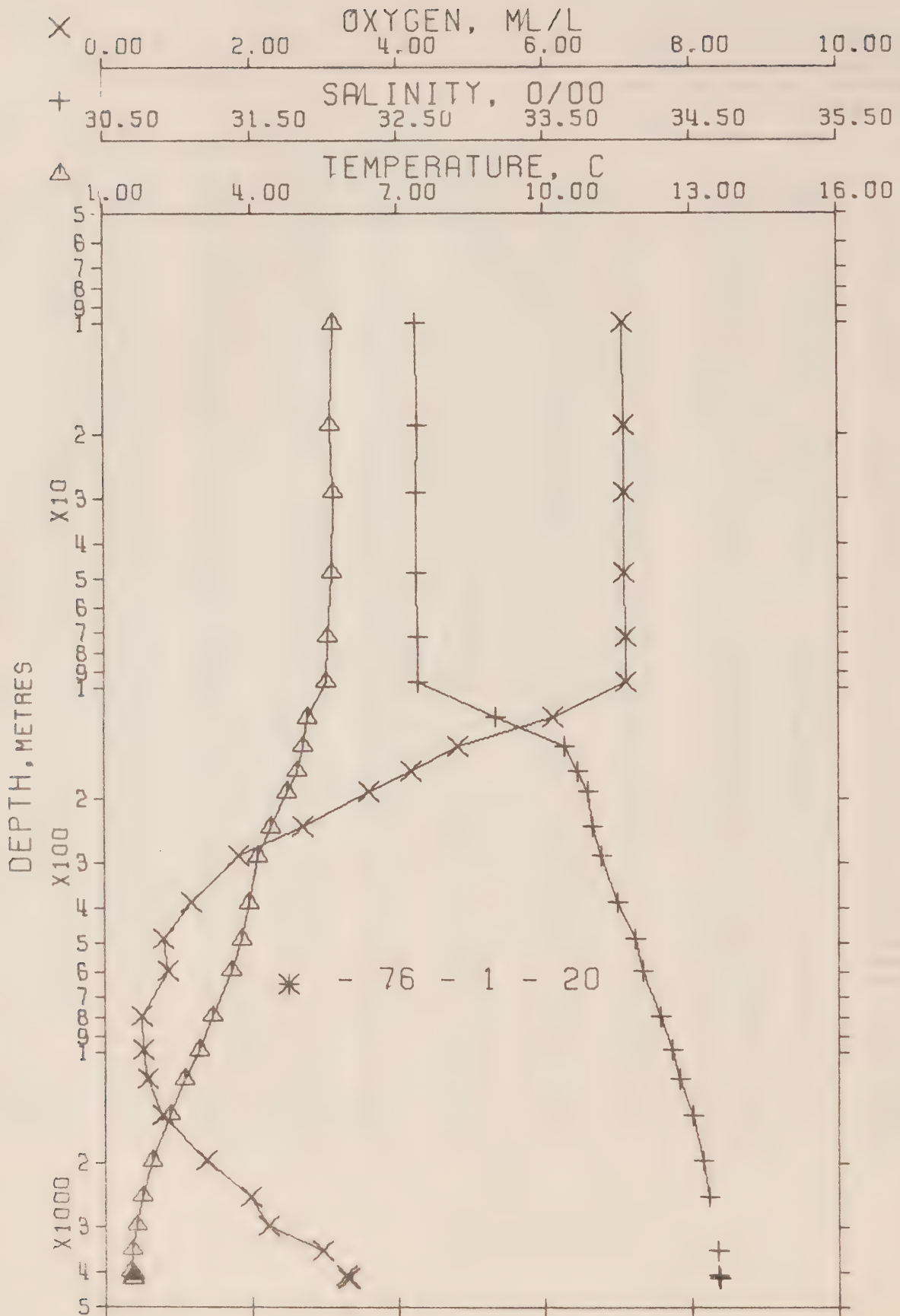
GMT 17.7

POSITION 50- 0.0 N, 145- 0.0 W

STATION P

## HYDROGRAPHIC CAST DATA

DEFS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	JXY	SOUND
0	5.68	32.626	0	25.742	226.3	5.68	226.1	0.0	0.0	7.11	1471.
10	5.68	32.627	10	25.743	226.4	5.68	226.0	0.23	0.01	7.09	1471.
20	5.64	32.624	20	25.746	226.2	5.64	225.3	0.46	0.05	7.09	1471.
30	5.72	32.628	30	25.739	226.9	5.72	226.4	0.63	0.11	7.07	1471.
50	5.67	32.629	50	25.746	226.5	5.67	225.7	1.14	0.29	7.08	1471.
75	5.67	32.629	75	25.746	226.8	5.66	225.7	1.71	0.66	7.07	1472.
100*	5.65	32.632	99	25.750	225.7	5.65	225.3	2.27	1.16	7.07	1472.
101	5.66	32.632	100	25.750	226.7	5.65	225.3	2.28	1.17	7.07	1472.
125	4.91	33.297	124	26.361	168.8	4.90	167.2	2.77	1.73	5.60	1470.
150	5.05	33.622	149	26.603	146.1	5.04	144.3	3.16	2.28	4.79	1472.
174	4.82	33.748	173	26.728	134.5	4.81	132.3	3.50	2.33	3.91	1471.
175*	4.81	33.750	174	26.731	134.2	4.80	132.0	3.51	2.35	3.89	1471.
199	4.50	33.812	198	26.814	126.5	4.49	124.2	3.82	3.46	3.38	1471.
200*	4.50	33.813	199	26.815	126.4	4.48	124.1	3.83	3.47	3.36	1471.
225*	4.35	33.840	225	26.853	122.9	4.33	120.5	4.14	4.15	2.78	1470.
249	4.22	33.854	247	26.895	120.0	4.20	117.4	4.43	4.84	2.28	1470.
250*	4.22	33.866	248	26.887	119.8	4.20	117.2	4.45	4.88	2.26	1470.
298	4.05	33.927	296	26.953	113.9	4.03	111.0	5.01	6.45	1.52	1470.
300*	4.05	33.929	298	26.955	113.7	4.02	110.8	5.03	6.51	1.51	1471.
399	3.87	34.040	396	27.061	104.5	3.84	100.7	6.11	10.37	0.98	1472.
400*	3.87	34.041	397	27.062	104.4	3.84	100.6	6.12	10.41	0.98	1472.
500*	3.74	34.117	496	27.135	98.2	3.71	93.6	7.13	15.04	0.82	1473.
502	3.74	34.118	498	27.136	98.0	3.70	93.5	7.15	15.15	0.81	1473.
600*	3.55	34.151	596	27.181	94.3	3.51	89.2	8.09	20.41	0.71	1474.
608	3.54	34.154	603	27.184	94.1	3.50	88.8	8.16	20.88		1474.
700*	3.37	34.222	701	27.255	87.9	3.32	82.1	9.00	26.47		1475.
800*	3.21	34.287	794	27.322	82.0	3.15	75.7	9.85	32.95	0.50	1476.
812	3.19	34.295	805	27.330	81.3	3.13	75.0	9.95	33.78	0.52	1476.
900*	3.03	34.336	897	27.378	77.1	2.97	70.4	10.64	39.83	0.54	1477.
1000*	2.86	34.379	992	27.427	72.8	2.80	65.7	11.39	47.08	0.55	1478.
1015	2.84	34.385	1005	27.434	72.1	2.77	65.1	11.50	48.19	0.56	1478.
1200*	2.62	34.440	1189	27.497	66.7	2.54	59.0	12.78	62.62	0.62	1480.
1217	2.60	34.445	1205	27.502	66.2	2.52	58.5	12.89	64.05	0.63	1480.
1500*	2.31	34.508	1486	27.577	59.8	2.21	51.2	14.67	88.59	0.73	1484.
1522	2.29	34.512	1505	27.582	59.4	2.19	50.8	14.80	90.59	0.74	1484.
2000*	1.96	34.583	1979	27.666	52.3	1.82	42.7	17.45	138.28	1.37	1491.
2030	1.94	34.587	2005	27.670	51.9	1.80	42.2	17.61	141.48	1.40	1491.
2500*	1.73	34.621	2470	27.713	48.6	1.56	38.0	19.95	195.71	2.02	1498.
2538	1.72	34.623	2504	27.716	48.3	1.54	37.6	20.14	200.46	2.06	1499.
3000*	1.62	34.648	2960	27.744	46.6	1.40	34.7	22.31	261.91	2.35	1506.
3045	1.61	34.651	3001	27.746	46.5	1.38	34.4	22.53	268.43	2.37	1507.
3500*	1.56	34.672	3449	27.766	45.6	1.29	32.3	24.62	338.16	2.93	1514.
3551	1.56	34.674	3495	27.769	45.5	1.28	32.0	24.85	346.49	2.99	1515.
4000*	1.52	34.677	3936	27.774	45.8	1.19	31.2	26.90	425.30	3.21	1523.
4055	1.51	34.677	3987	27.775	45.8	1.18	31.1	27.15	435.69		1524.
4100*	1.54	34.678	4031	27.773	46.5	1.21	31.3	27.36	444.26		1525.
4155	1.58	34.678	4084	27.770	47.2	1.24	31.5	27.61	455.09	3.28	1526.
4200*	1.56	34.677	4128	27.771	47.1	1.21	31.4	27.83	464.16	3.31	1526.
4245	1.54	34.676	4172	27.772	47.0	1.19	31.3	28.04	473.27	3.33	1527.
4255	1.57	34.676	4182	27.769	47.4	1.22	31.5	28.09	475.37	3.28	1527.





## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 1- 20

DATE 10/ 2/76

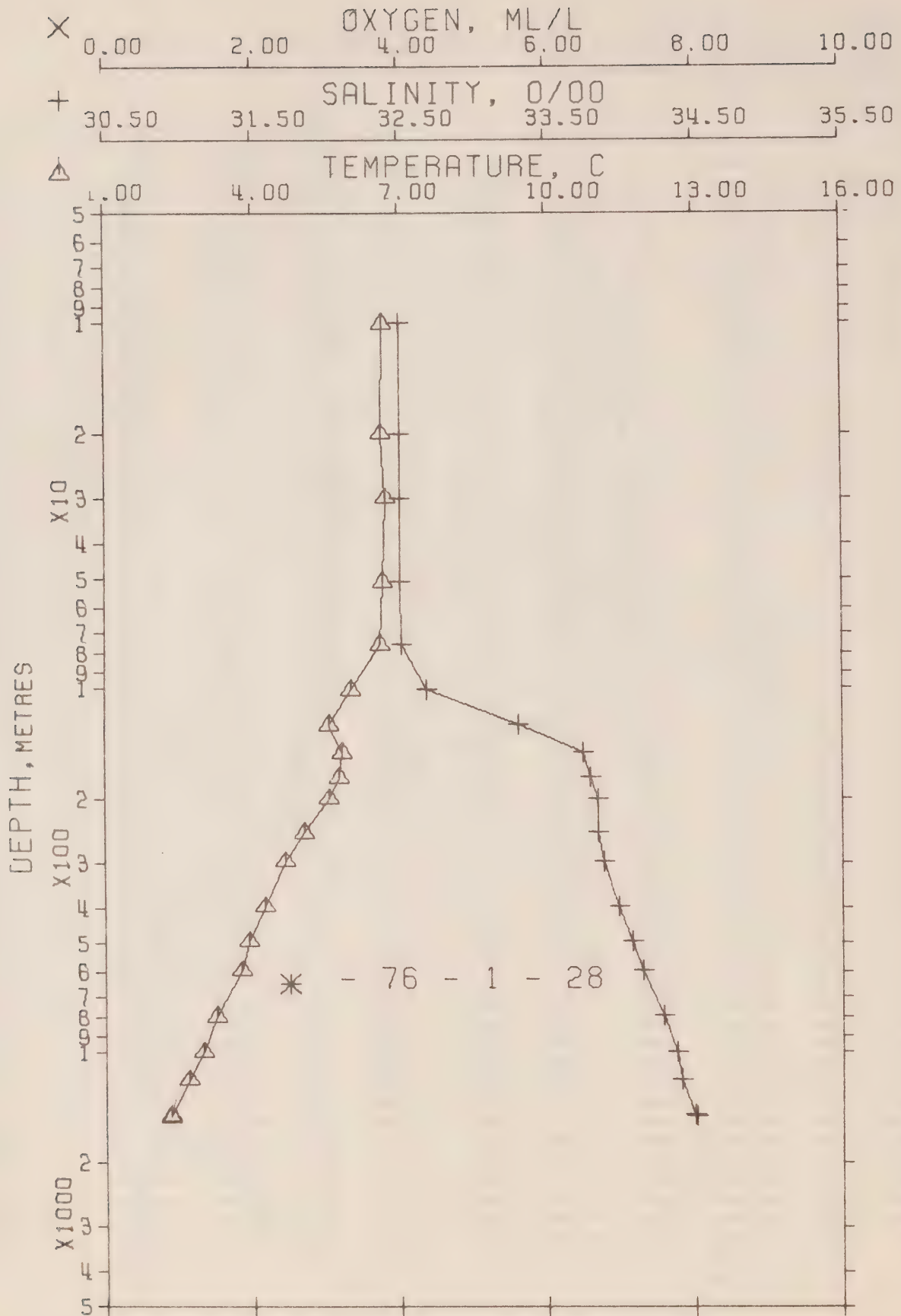
GMT 18.2

POSITION 50- 0.0 N, 145- 0.0 W

STATION P

## HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	5.69	32.624	0	25.740	226.5	5.69	226.3	0.0	0.0	7.11	1471.
10	5.69	32.627	10	25.742	226.5	5.69	226.1	0.23	0.01	7.09	1471.
19	5.63	32.637	19	25.757	225.1	5.63	224.7	0.43	0.04	7.10	1471.
20*	5.64	32.637	20	25.756	225.2	5.63	224.8	0.45	0.05	7.10	1471.
29	5.68	32.634	29	25.749	226.0	5.68	225.5	0.66	0.10	7.10	1471.
30*	5.68	32.634	30	25.749	226.0	5.69	225.5	0.68	0.10	7.10	1471.
48	5.64	32.631	48	25.751	225.9	5.64	225.2	1.09	0.27	7.10	1471.
50*	5.63	32.632	50	25.753	225.9	5.63	225.0	1.13	0.29	7.10	1471.
72	5.57	32.642	72	25.763	224.6	5.56	223.6	1.64	0.60	7.11	1471.
75*	5.57	32.642	75	25.769	224.6	5.56	223.5	1.69	0.65	7.11	1471.
97	5.54	32.645	96	25.774	224.3	5.53	223.1	2.19	1.08	7.11	1472.
100*	5.48	32.726	100	25.845	217.6	5.47	216.3	2.26	1.16	6.96	1472.
121	5.15	33.175	120	26.238	180.4	5.14	179.9	2.67	1.62	6.13	1471.
125*	5.13	33.261	124	26.308	173.8	5.12	172.2	2.75	1.71	5.88	1471.
145	5.05	33.636	144	26.614	145.1	5.04	143.3	3.06	2.14	4.83	1472.
150*	5.02	33.657	149	26.633	143.2	5.01	141.4	3.14	2.25	4.68	1472.
169	4.93	33.731	168	26.703	136.9	4.92	134.8	3.40	2.69	4.18	1472.
175*	4.88	33.748	174	26.722	135.0	4.87	133.0	3.43	2.83	4.03	1472.
193	4.73	33.800	192	26.780	129.7	4.72	127.4	3.73	3.28	3.61	1471.
200*	4.68	33.805	199	26.789	128.9	4.66	126.5	3.81	3.46	3.47	1471.
225*	4.49	33.822	225	26.823	125.8	4.48	123.3	4.13	4.14	2.99	1471.
242	4.38	33.833	240	26.844	124.0	4.36	121.4	4.34	4.64	2.70	1471.
250*	4.33	33.843	249	26.857	122.8	4.32	120.1	4.44	4.90	2.54	1471.
291	4.13	33.889	289	26.915	117.6	4.11	114.6	4.93	6.26	1.81	1471.
300*	4.11	33.900	299	26.925	116.6	4.09	113.6	5.04	6.57	1.75	1471.
390	3.93	33.998	387	27.022	108.1	3.90	104.4	6.05	10.13	1.18	1472.
400*	3.91	34.011	398	27.033	107.1	3.89	103.3	6.16	10.56	1.14	1472.
492	3.78	34.117	488	27.131	98.5	3.75	94.0	7.10	14.84	0.80	1473.
500*	3.76	34.122	497	27.137	98.1	3.73	93.4	7.17	15.23	0.81	1473.
598	3.57	34.173	593	27.197	92.9	3.53	87.7	8.12	20.50	0.86	1474.
600*	3.57	34.174	595	27.198	92.7	3.52	87.6	8.13	20.61	0.86	1474.
700*	3.37	34.237	701	27.267	86.7	3.32	81.0	9.03	26.53	0.67	1475.
796	3.20	34.290	799	27.325	81.6	3.15	75.4	9.84	32.70	0.51	1476.
800*	3.19	34.292	793	27.327	81.5	3.14	75.3	9.87	32.95	0.51	1476.
900*	3.04	34.336	897	27.377	77.2	2.98	70.5	10.66	39.81	0.52	1477.
993	2.91	34.373	983	27.418	73.6	2.84	66.6	11.36	46.54	0.53	1478.
1000*	2.90	34.375	991	27.420	73.4	2.83	66.3	11.41	47.10	0.53	1478.
1192	2.62	34.425	1180	27.485	67.8	2.54	60.1	12.77	62.24	0.58	1480.
1200*	2.61	34.427	1189	27.488	67.6	2.53	59.8	12.82	62.89	0.59	1480.
1493	2.31	34.511	1477	27.580	59.5	2.21	51.1	14.66	88.17	0.78	1484.
1500*	2.30	34.512	1485	27.581	59.4	2.20	50.9	14.70	88.77	0.79	1484.
2000*	1.95	34.585	1976	27.668	52.1	1.81	42.5	17.47	137.98	1.39	1491.
2001	1.95	34.585	1977	27.668	52.1	1.81	42.5	17.47	139.13	1.39	1491.
2500*	1.75	34.617	2468	27.709	48.9	1.57	38.2	19.99	195.87	1.97	1498.
2515	1.74	34.618	2481	27.710	48.9	1.56	38.1	20.06	197.71	1.99	1498.
3000*	1.65	34.648	2959	27.741	47.0	1.42	35.0	22.39	263.12	2.21	1506.
3028	1.64	34.650	2984	27.743	46.9	1.41	34.8	22.52	267.17	2.22	1507.
3500*	1.56	34.674	3448	27.769	45.3	1.29	32.0	24.70	339.44	2.91	1514.
3540	1.55	34.676	3484	27.771	45.2	1.28	31.8	24.87	345.87	2.96	1515.
4000*	1.51	34.683	3936	27.779	45.4	1.19	30.7	26.95	425.78	3.20	1523.
4046	1.51	34.684	3978	27.780	45.4	1.18	30.6	27.16	434.34		1524.
4100*	1.54	34.684	4031	27.778	46.0	1.21	30.7	27.41	444.57		1525.
4146	1.57	34.685	4075	27.777	46.6	1.23	30.8	27.62	453.45	3.27	1525.
4200*	1.55	34.686	4128	27.779	46.2	1.20	30.6	27.87	464.20	3.29	1526.
4236	1.53	34.687	4163	27.781	46.0	1.18	30.4	28.04	471.31	3.29	1527.
4246	1.56	34.688	4173	27.780	46.4	1.21	30.5	28.09	473.36	3.32	1527.



## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 1- 28 DATE 17/ 2/76 GMT 0.2

POSITION 49-26.0 N. 136-40.0 W STATION 9

## HYDROGRAPHIC CAST DATA

DEFS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	6.69	32.513	0	25.528	246.7	6.69	246.5	0.0	0.0		1475.
10	6.68	32.513	10	25.529	246.7	6.68	246.3	0.25	0.01		1475.
20	6.63	32.514	20	25.536	246.2	6.63	245.7	0.50	0.05		1475.
30	6.72	32.512	30	25.523	247.6	6.72	246.9	0.74	0.11		1475.
50*	6.66	32.514	50	25.532	246.9	6.66	246.1	1.23	0.31		1475.
51	6.66	32.514	51	25.532	246.9	6.66	246.0	1.27	0.33		1475.
75*	6.61	32.517	75	25.541	246.4	6.61	245.2	1.85	0.71		1475.
76	6.61	32.517	76	25.541	246.4	6.60	245.2	1.89	0.74		1475.
100*	6.04	32.680	100	25.741	227.6	6.04	226.1	2.45	1.24		1474.
102	6.01	32.690	101	25.753	226.4	6.00	225.0	2.49	1.28		1474.
125*	5.59	33.271	124	26.263	178.3	5.59	176.6	2.97	1.83		1473.
127	5.56	33.312	126	26.258	174.9	5.55	173.1	3.00	1.87		1473.
150*	5.83	33.733	149	26.598	146.9	5.82	144.7	3.37	2.39		1475.
151	5.84	33.750	150	26.610	145.8	5.83	143.5	3.38	2.42		1475.
175*	5.77	33.798	174	26.656	141.7	5.76	139.2	3.72	2.98		1475.
176	5.77	33.800	175	26.658	141.5	5.76	139.0	3.74	3.01		1475.
200*	5.57	33.848	199	26.721	135.8	5.55	133.0	4.07	3.64		1475.
201	5.56	33.851	200	26.724	135.5	5.54	132.7	4.09	3.68		1475.
225*	5.30	33.850	225	26.754	132.7	5.28	129.9	4.40	4.37		1474.
250*	5.05	33.849	248	26.783	130.2	5.03	127.1	4.73	5.16		1474.
251	5.04	33.849	249	26.784	130.1	5.02	127.1	4.74	5.19		1474.
300	4.65	33.886	298	26.857	123.5	4.63	120.1	5.37	6.95		1473.
399	4.24	33.992	396	26.985	112.0	4.21	107.9	6.53	11.08		1473.
400*	4.24	33.993	397	26.986	111.9	4.21	107.8	6.54	11.12		1473.
498	3.90	34.078	494	27.088	102.7	3.86	98.0	7.58	15.91		1473.
500*	3.90	34.080	496	27.090	102.6	3.86	97.9	7.60	16.01		1473.
598	3.76	34.150	593	27.160	96.7	3.72	91.2	8.59	21.51		1474.
600*	3.75	34.152	595	27.161	96.5	3.71	91.0	8.61	21.62		1474.
700*	3.48	34.225	701	27.247	88.8	3.43	82.9	9.53	27.75		1475.
800*	3.24	34.289	793	27.320	82.3	3.19	75.9	10.39	34.30		1476.
802	3.24	34.290	795	27.321	82.1	3.18	75.8	10.41	34.45		1476.
900*	3.11	34.338	897	27.372	77.8	3.04	70.9	11.18	41.20		1477.
1000*	2.99	34.382	991	27.418	73.9	2.92	66.5	11.94	48.55		1478.
1005	2.98	34.384	995	27.420	73.6	2.91	66.3	11.98	48.90		1478.
1200	2.68	34.415	1188	27.472	69.2	2.60	61.4	13.36	64.46		1480.
1500*	2.33	34.504	1484	27.572	60.3	2.23	51.7	15.30	91.18		1484.
1503	2.33	34.505	1487	27.573	60.2	2.23	51.6	15.32	91.49		1484.
1515	2.32	34.508	1498	27.576	60.0	2.22	51.3	15.39	92.52		1484.





Results of STP Observations  
(P-76-1)

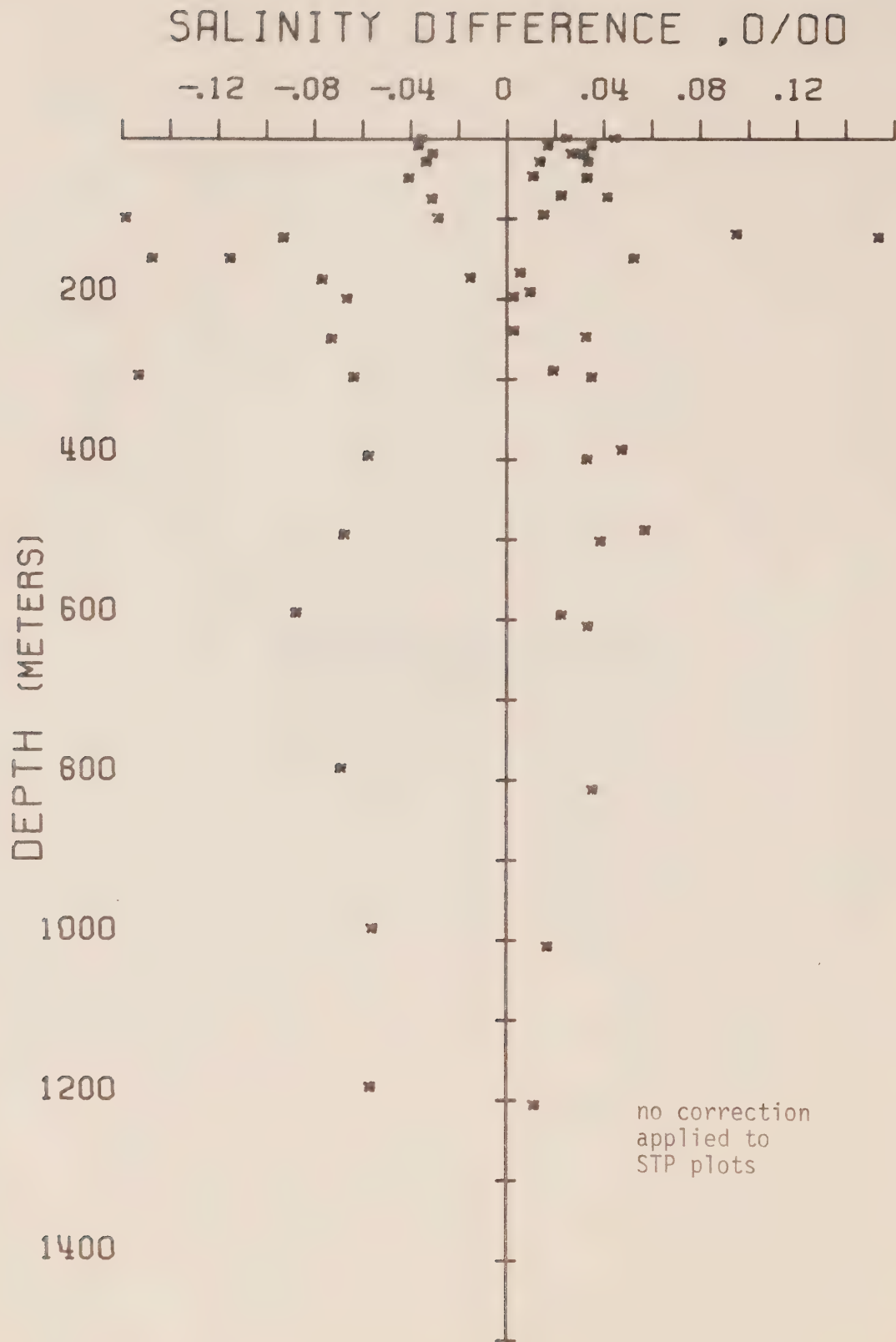


Figure 7. Salinity differences between hydro data and STP. P-76-1

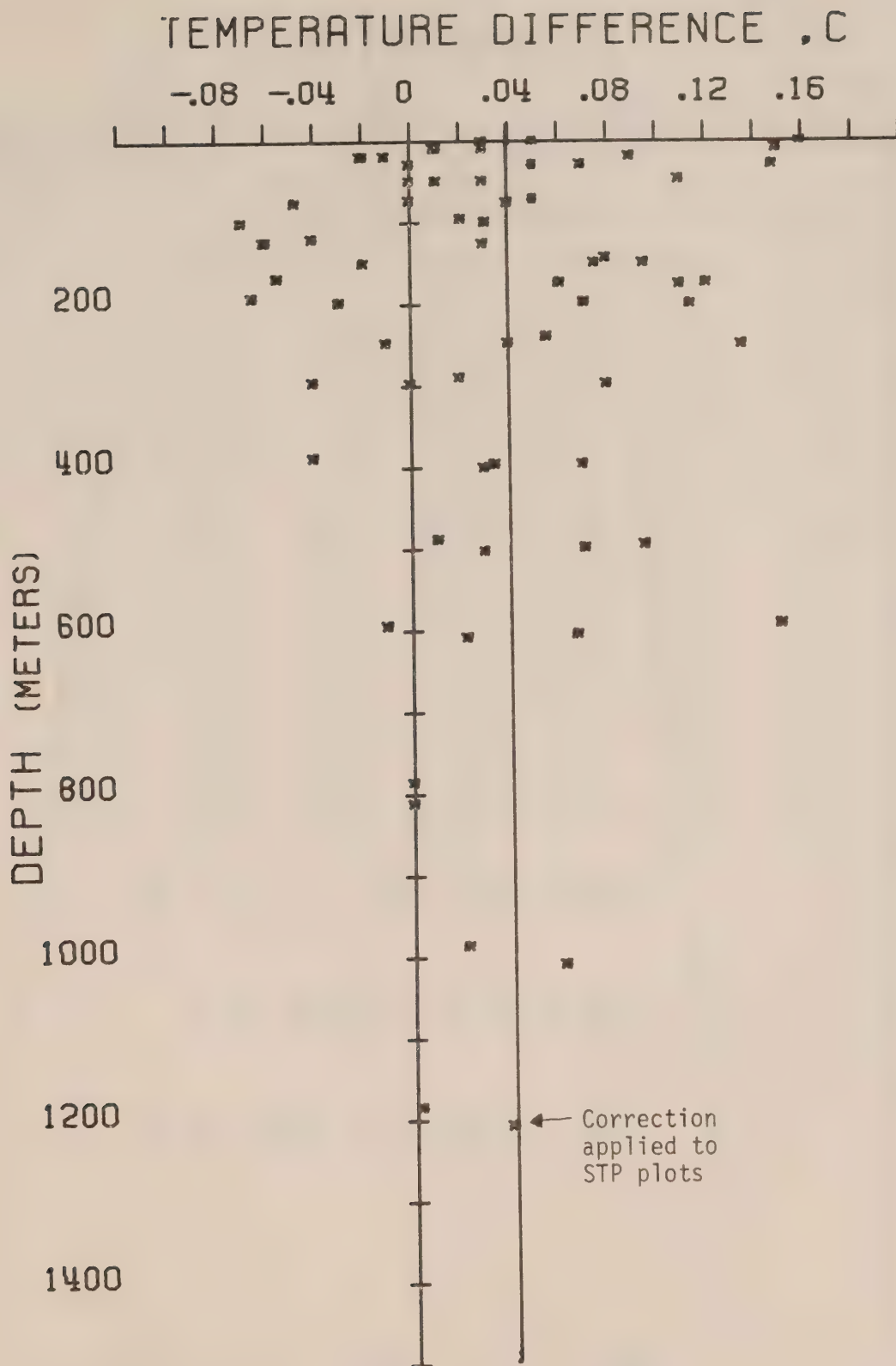
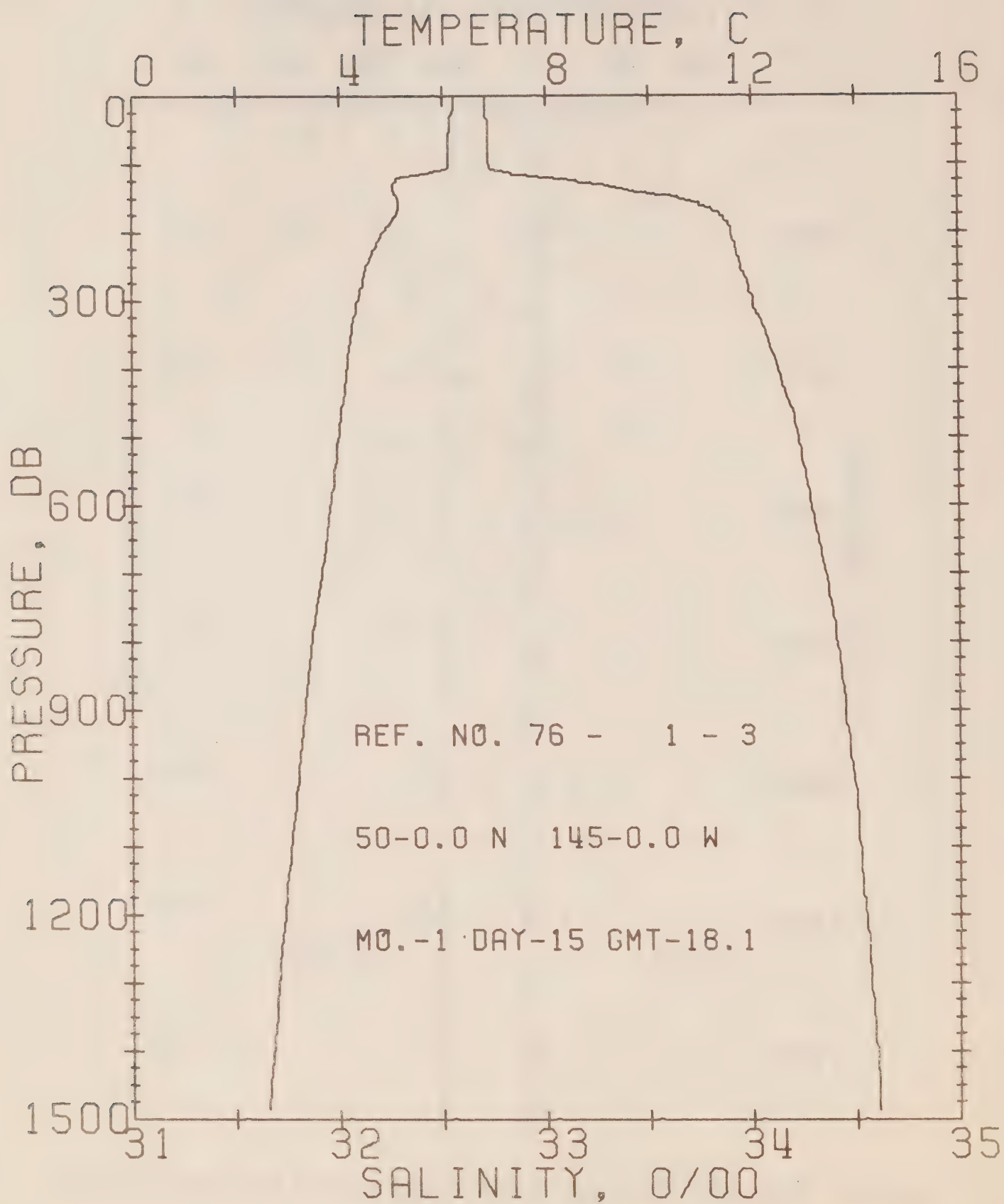


Figure 8. Temperature difference between hydro data and STP. P-76-1





## OFFSHORE OCEANOGRAPHY GROUP

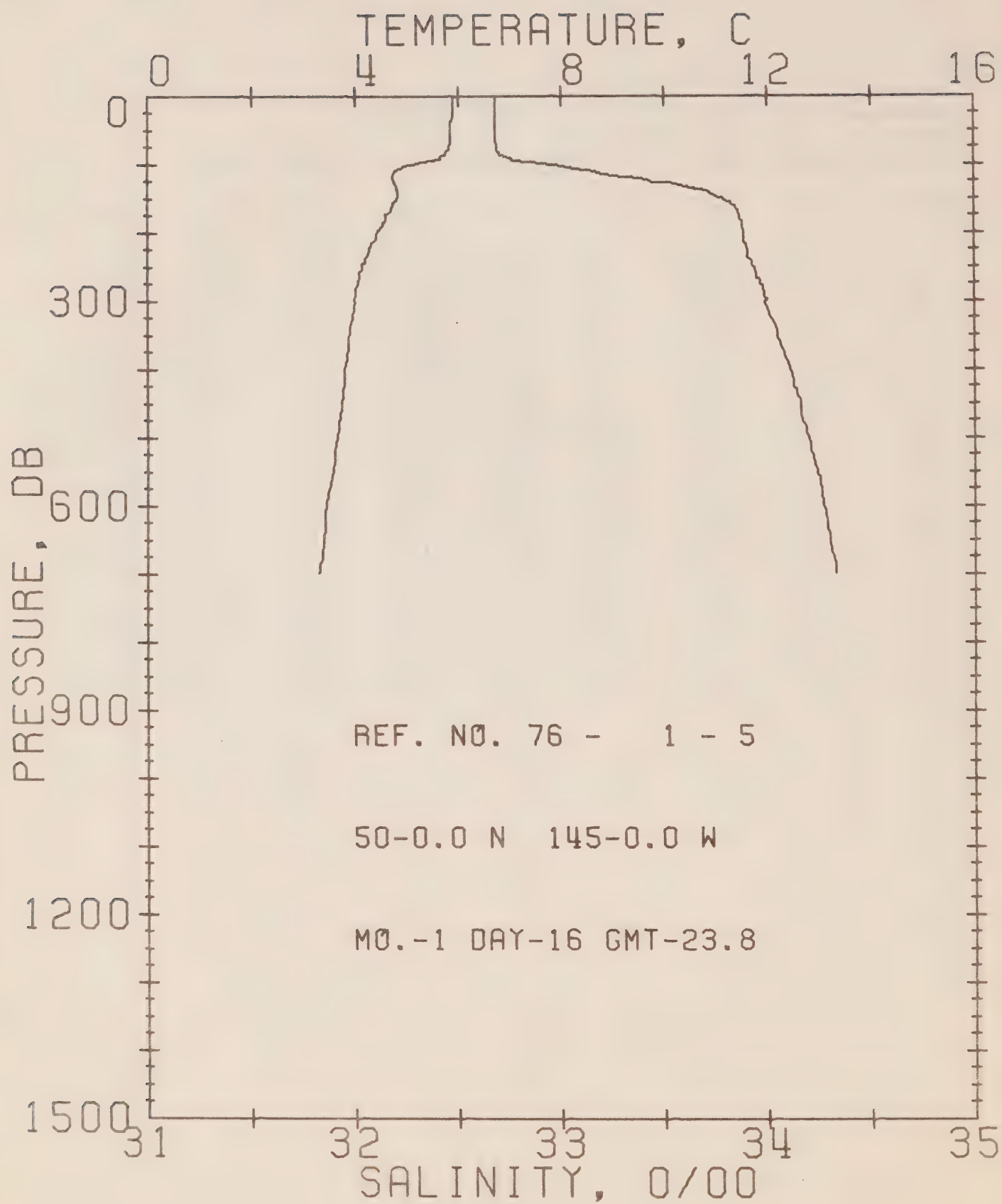
REFERENCE NO. 76- 1- 3

DATE 15/ 1/76

POSITION 50- 0.0N, 145- 0.0W GMT 18.1

RESULTS OF STP CAST 342 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.90	32.63	0	25.72	228.3	0.0	0.0	1472.
10	5.90	32.63	10	25.72	228.6	0.23	0.01	1472.
20	5.89	32.63	20	25.72	228.6	0.46	0.05	1472.
30	5.82	32.63	30	25.73	227.9	0.69	0.10	1472.
50	5.80	32.64	50	25.74	227.2	1.14	0.29	1472.
75	5.79	32.64	75	25.74	227.3	1.71	0.65	1472.
100	5.79	32.64	99	25.74	227.6	2.28	1.16	1473.
125	4.77	33.07	124	26.20	194.3	2.81	1.77	1470.
150	4.81	33.56	149	26.58	148.2	3.23	2.35	1471.
175	4.77	33.77	174	26.75	132.3	3.57	2.93	1471.
200	4.53	33.82	199	26.82	126.1	3.90	3.54	1471.
225	4.34	33.84	223	26.86	122.5	4.21	4.21	1470.
250	4.19	33.87	248	26.89	119.3	4.51	4.94	1470.
300	4.02	33.93	298	26.96	113.5	5.09	6.58	1470.
400	3.82	34.05	397	27.07	103.4	6.18	10.43	1471.
500	3.66	34.16	496	27.17	95.1	7.17	14.97	1472.
600	3.51	34.21	595	27.23	89.8	8.09	20.15	1474.
800	3.14	34.32	793	27.36	78.4	9.77	32.06	1475.
1000	2.87	34.41	990	27.45	70.7	11.25	45.67	1478.
1200	2.61	34.47	1188	27.52	64.5	12.60	60.82	1480.



## OFFSHORE OCEANOGRAPHY GROUP

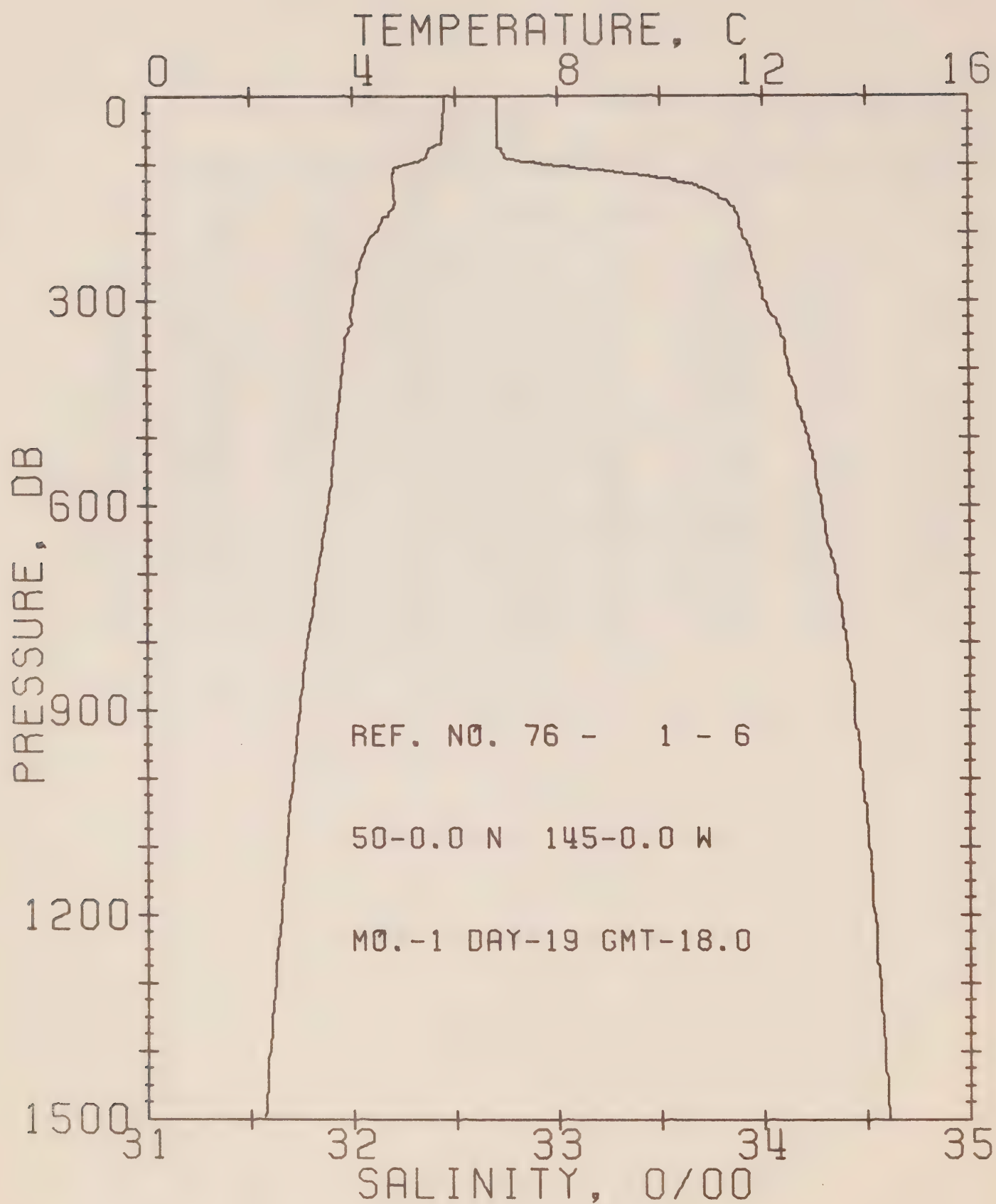
REFERENCE NO. 76- 1- 5

DATE 16/ 1/76

POSITION 50- 0.0N, 145- 0.0W GMT 23.8

RESULTS OF STD CAST 277 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.89	32.69	0	25.77	223.7	0.0	0.0	1472.
10	5.89	32.68	10	25.76	224.7	0.22	0.01	1472.
20	5.89	32.68	20	25.76	224.8	0.45	0.05	1472.
30	5.89	32.68	30	25.76	225.0	0.67	0.10	1472.
50	5.85	32.68	50	25.76	224.7	1.12	0.29	1472.
75	5.80	32.69	75	25.78	223.7	1.68	0.64	1472.
100	5.10	32.96	99	26.07	195.8	2.23	1.13	1470.
125	4.76	33.44	124	26.49	156.3	2.67	1.63	1470.
150	4.80	33.79	149	26.76	130.9	3.02	2.12	1471.
175	4.59	33.87	174	26.85	123.1	3.33	2.64	1471.
200	4.41	33.89	199	26.89	119.7	3.64	3.22	1470.
225	4.26	33.91	223	26.91	117.1	3.93	3.86	1470.
250	4.12	33.94	248	26.95	113.6	4.22	4.56	1470.
300	4.00	33.99	298	27.01	108.7	4.78	6.11	1470.
400	3.90	34.11	397	27.12	98.5	5.81	9.80	1471.
500	3.66	34.20	496	27.21	91.1	6.76	14.14	1473.
600	3.44	34.27	595	27.29	84.3	7.64	19.04	1473.





## OFFSHORE OCEANOGRAPHY GROUP

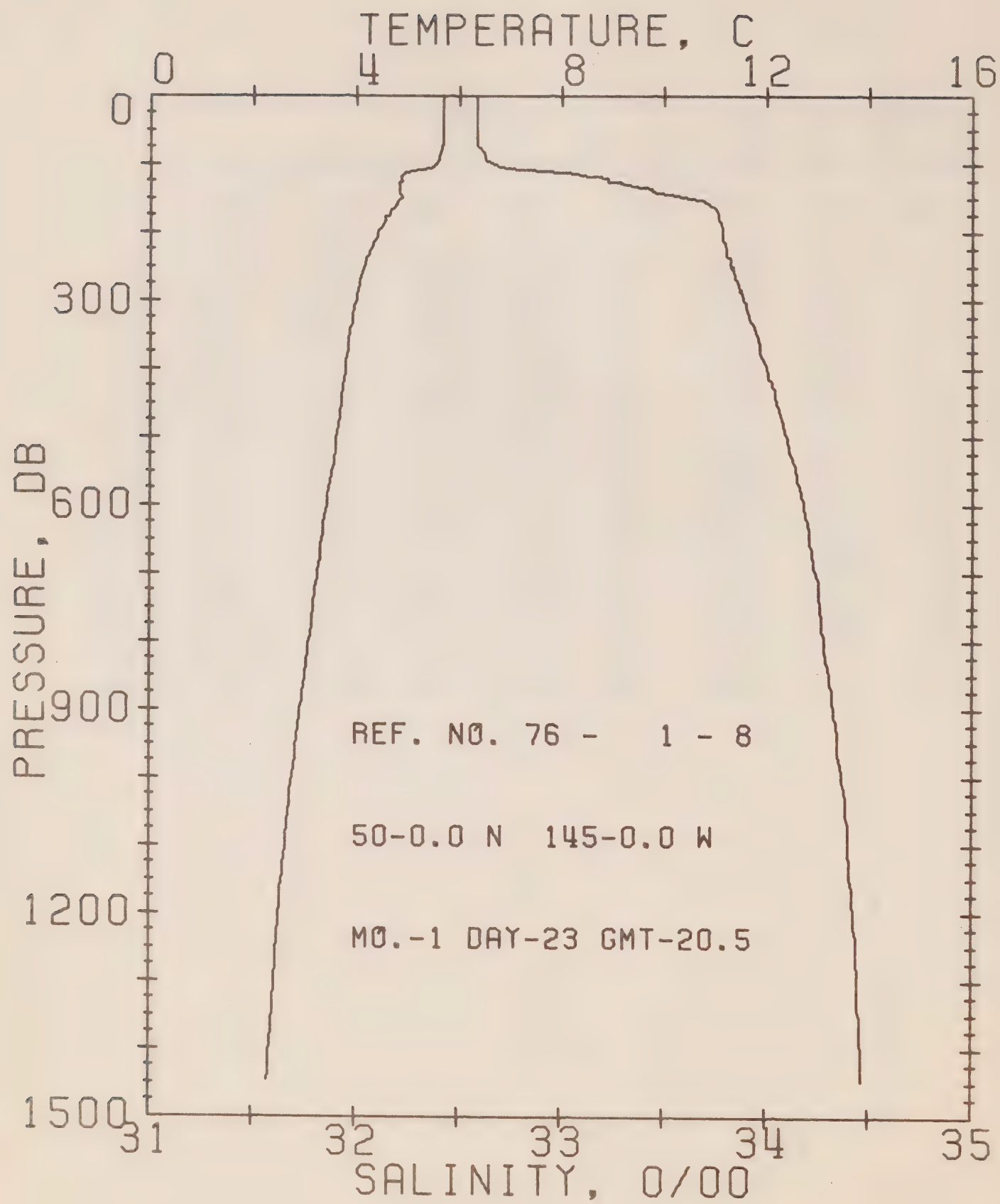
REFERENCE NO. 76- 1- 6

DATE 19/ 1/76

POSITION 50- 0.0N, 145- 0.0W GMT 18.0

RESULTS OF STP CAST 420 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.79	32.68	0	25.77	223.3	0.0	0.0	1471.
10	5.78	32.71	10	25.80	221.3	0.22	0.01	1471.
20	5.78	32.71	20	25.80	221.4	0.44	0.05	1471.
30	5.77	32.71	30	25.80	221.3	0.66	0.10	1472.
50	5.74	32.71	50	25.80	221.3	1.11	0.28	1472.
75	5.51	32.71	75	25.83	218.9	1.66	0.63	1471.
100	5.10	32.93	99	26.05	198.0	2.19	1.11	1470.
125	4.78	33.60	124	26.62	144.6	2.61	1.59	1470.
150	4.81	33.79	149	26.77	130.6	2.95	2.06	1471.
175	4.68	33.88	174	26.85	123.1	3.27	2.58	1471.
200	4.44	33.90	199	26.89	119.2	3.57	3.16	1470.
225	4.23	33.94	223	26.94	114.2	3.86	3.79	1470.
250	4.11	33.96	248	26.97	111.6	4.14	4.47	1470.
300	4.00	34.01	298	27.02	107.2	4.69	6.00	1470.
400	3.78	34.13	397	27.14	96.9	5.70	9.60	1471.
500	3.65	34.22	496	27.23	89.5	6.63	13.88	1472.
600	3.50	34.28	595	27.29	83.9	7.50	18.74	1474.
800	3.09	34.41	793	27.43	71.9	9.06	29.31	1475.
1000	2.82	34.48	990	27.51	64.8	10.42	42.29	1478.
1200	2.58	34.54	1188	27.58	59.0	11.65	56.08	1480.



## OFFSHORE OCEANOGRAPHY GROUP

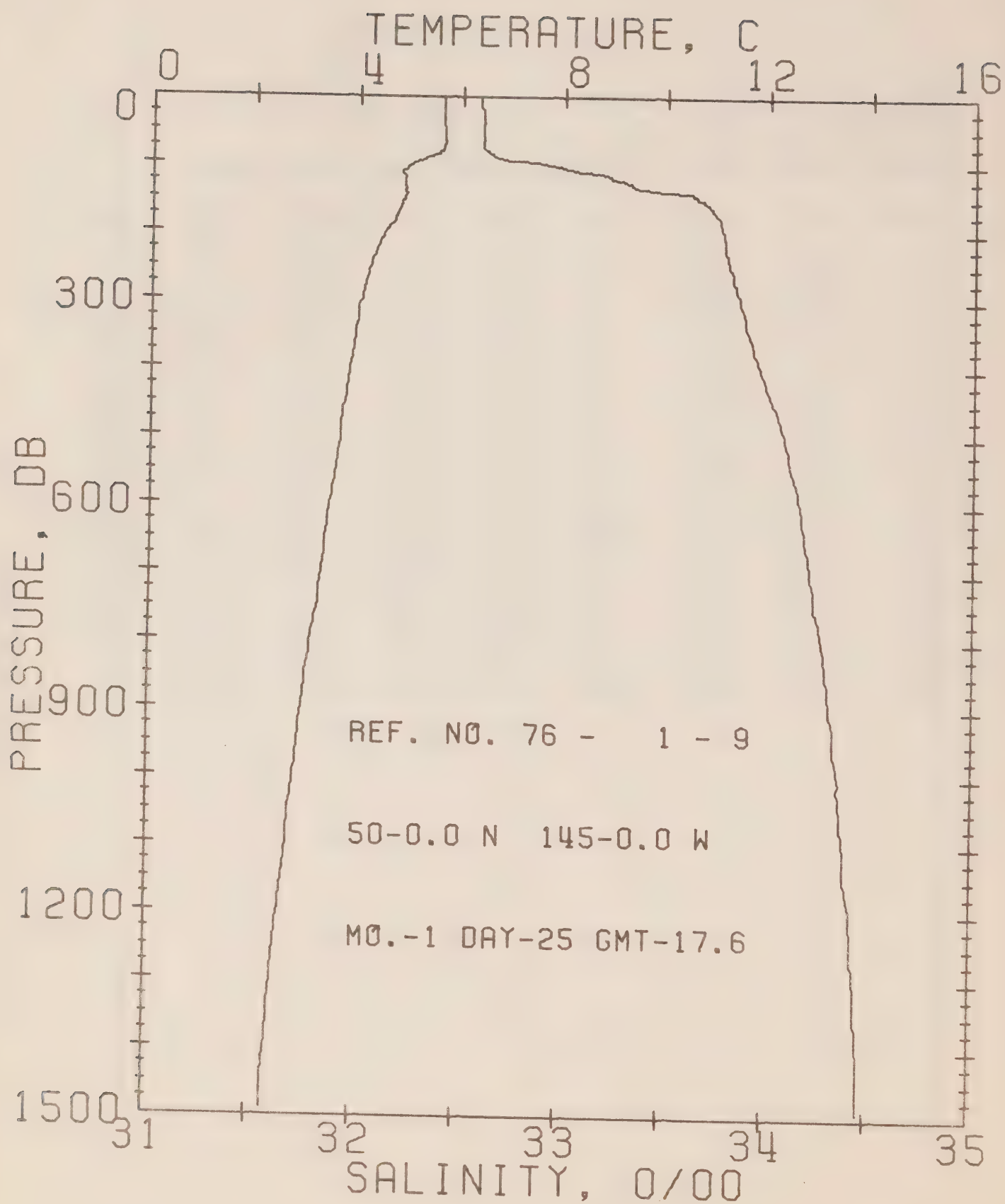
REFERENCE NO. 76- 1- 8

DATE 23/ 1/76

POSITION 50- 0.0N, 145- 0.0W GMT 20.5

RESULTS OF STP CAST 342 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.69	32.58	0	25.71	229.7	0.0	0.0	1471.
10	5.68	32.59	10	25.71	229.1	0.23	0.01	1471.
20	5.69	32.59	20	25.71	229.4	0.46	0.05	1471.
30	5.69	32.59	30	25.71	229.5	0.69	0.11	1471.
50	5.68	32.59	50	25.71	229.5	1.15	0.29	1471.
75	5.66	32.60	75	25.72	228.8	1.72	0.66	1472.
100	5.54	32.67	99	25.79	222.5	2.29	1.16	1472.
125	4.87	33.23	124	26.31	173.4	2.78	1.72	1470.
150	4.88	33.62	149	26.62	144.4	3.17	2.27	1471.
175	4.61	33.77	174	26.77	130.5	3.51	2.83	1471.
200	4.41	33.79	199	26.81	127.1	3.83	3.45	1470.
225	4.27	33.81	223	26.84	124.4	4.15	4.13	1470.
250	4.14	33.84	248	26.87	120.9	4.45	4.87	1470.
300	3.99	33.89	298	26.93	116.1	5.05	6.53	1470.
400	3.79	34.00	397	27.04	106.6	6.16	10.49	1471.
500	3.61	34.10	496	27.13	93.2	7.18	15.17	1472.
600	3.43	34.18	595	27.22	90.9	8.13	20.47	1473.
800	3.09	34.28	793	27.33	81.3	9.34	32.66	1475.
1000	2.77	34.37	990	27.43	72.4	11.37	46.71	1477.
1200	2.51	34.43	1188	27.50	66.3	12.76	62.20	1479.





## OFFSHORE OCEANOGRAPHY GROUP

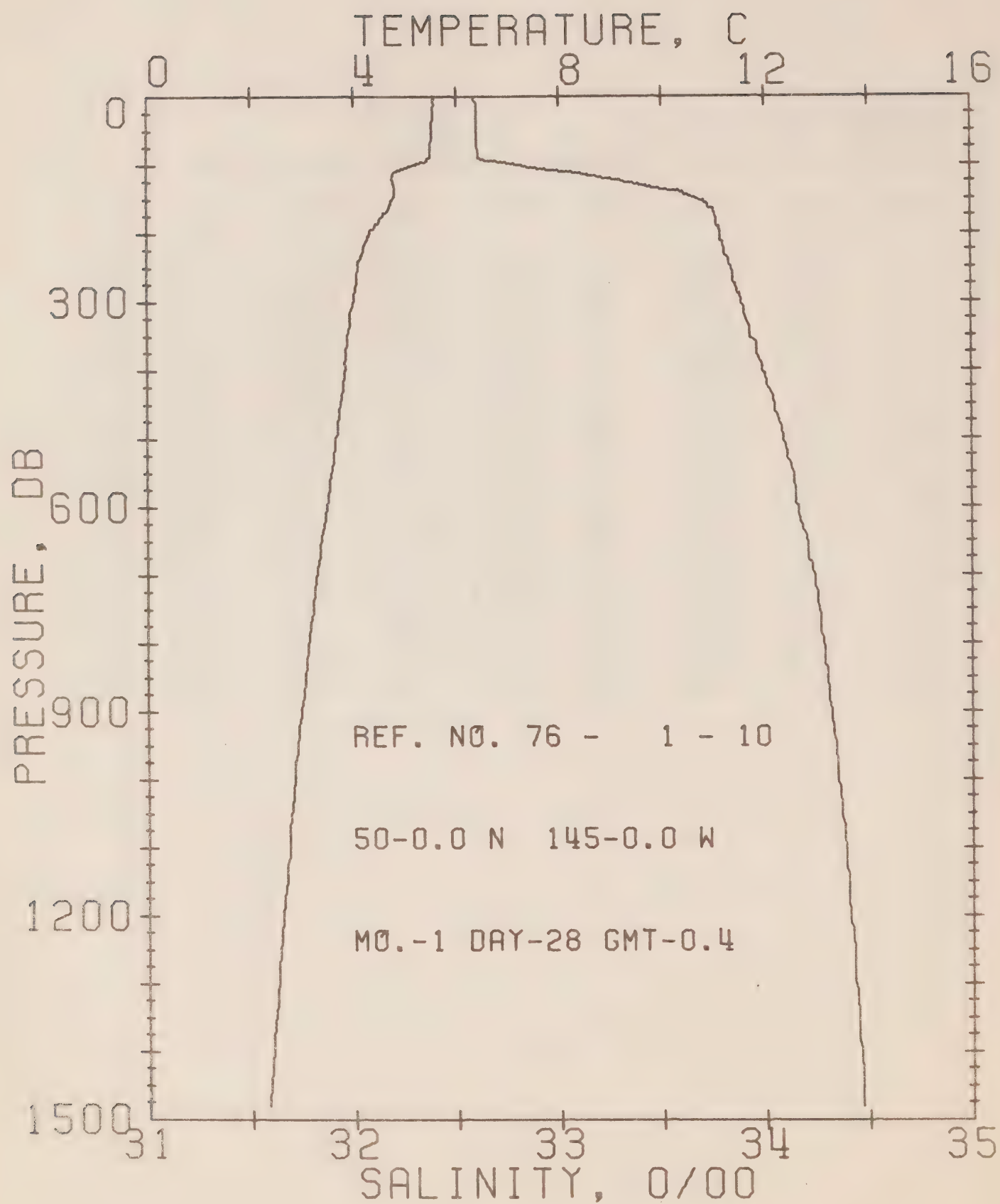
REFERENCE NO. 76- 1- 9

DATE 25/ 1/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.6

RESULTS OF STP CAST 383 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.63	32.59	0	25.72	228.2	0.0	0.0	1470.
10	5.63	32.59	10	25.72	228.5	0.23	0.01	1471.
20	5.64	32.60	20	25.73	228.0	0.46	0.05	1471.
30	5.63	32.60	30	25.73	228.0	0.68	0.10	1471.
50	5.65	32.60	50	25.73	228.4	1.14	0.29	1471.
75	5.62	32.60	75	25.73	228.4	1.71	0.65	1472.
100	5.02	32.92	99	26.05	197.9	2.26	1.14	1470.
125	4.89	33.31	124	26.38	167.4	2.71	1.66	1470.
150	4.87	33.66	149	26.65	141.4	3.10	2.20	1471.
175	4.72	33.75	174	26.74	133.2	3.44	2.76	1471.
200	4.49	33.78	199	26.79	123.7	3.77	3.39	1471.
225	4.34	33.79	223	26.81	126.6	4.09	4.08	1470.
250	4.22	33.81	248	26.84	124.1	4.40	4.84	1470.
300	4.05	33.86	298	26.90	119.0	5.00	6.53	1470.
400	3.84	33.96	397	27.00	110.2	6.15	10.61	1471.
500	3.67	34.08	496	27.11	100.2	7.20	15.41	1472.
600	3.48	34.16	595	27.19	93.0	8.16	20.92	1473.
800	3.13	34.27	793	27.32	82.4	9.93	33.37	1475.
1000	2.83	34.35	990	27.41	74.2	11.50	47.72	1477.
1200	2.57	34.42	1188	27.49	67.6	12.92	63.69	1480.



## OFFSHORE OCEANOGRAPHY GROUP

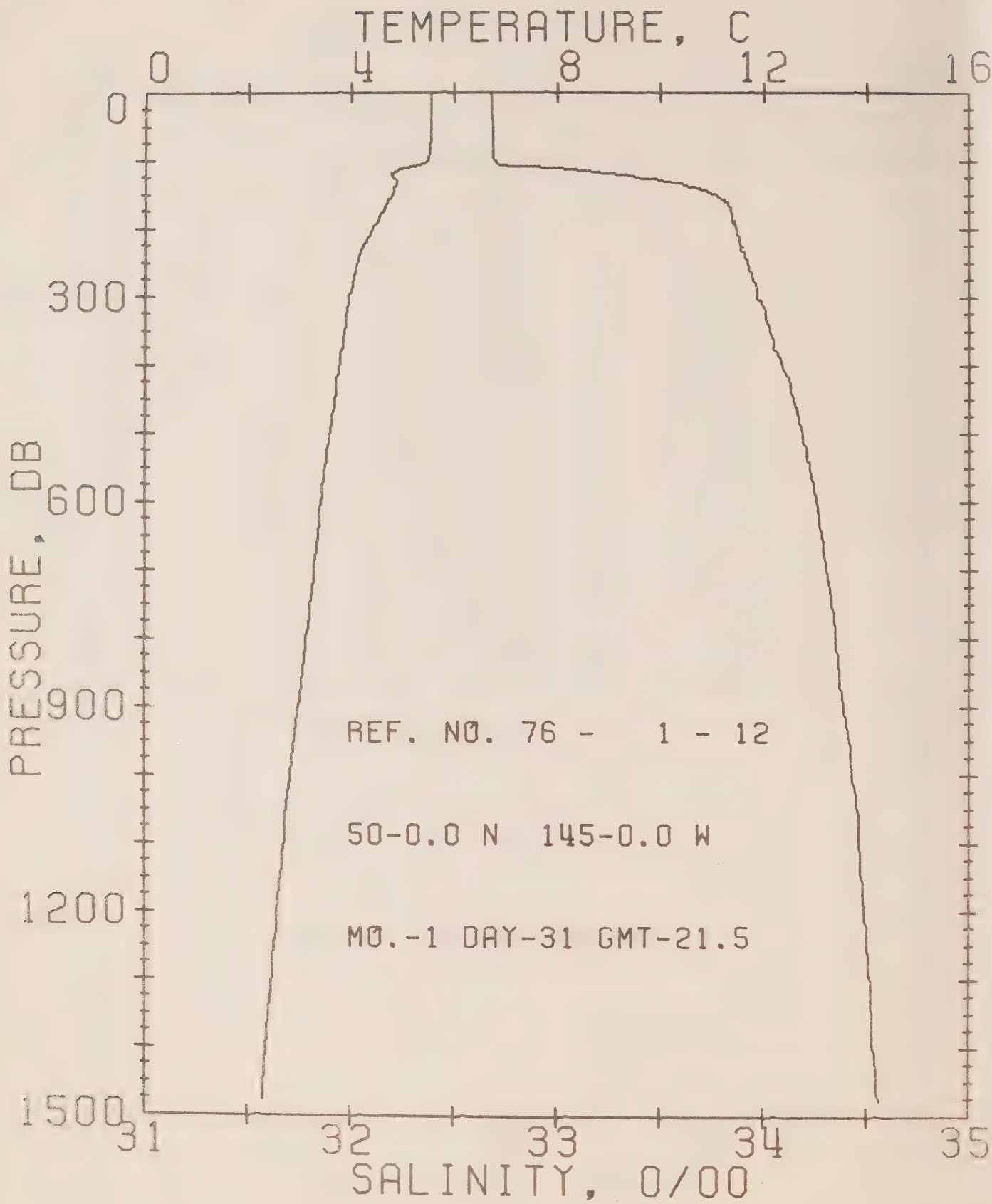
REFERENCE NO. 76- 1- 10

DATE 28/ 1/76

POSITION 50- 0.0N, 145- 0.0W GMT 0.4

RESULTS OF STP CAST 360 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.55	32.58	0	25.72	228.1	0.0	0.0	1470.
10	5.56	32.60	10	25.74	227.0	0.23	0.01	1470.
20	5.54	32.60	20	25.74	226.9	0.45	0.05	1470.
30	5.54	32.60	30	25.74	227.0	0.68	0.10	1471.
50	5.53	32.60	50	25.74	227.1	1.14	0.29	1471.
75	5.50	32.60	75	25.74	227.0	1.70	0.65	1471.
100	5.22	32.80	99	25.93	209.1	2.26	1.15	1471.
125	4.77	33.32	124	26.39	165.6	2.73	1.68	1470.
150	4.76	33.67	149	26.67	139.3	3.10	2.20	1471.
175	4.55	33.76	174	26.77	130.7	3.44	2.76	1470.
200	4.31	33.79	199	26.82	126.1	3.76	3.37	1470.
225	4.19	33.81	223	26.85	123.5	4.07	4.05	1470.
250	4.08	33.84	248	26.88	120.4	4.38	4.79	1470.
300	3.98	33.89	298	26.93	116.0	4.97	6.45	1470.
400	3.82	33.99	397	27.03	107.7	6.09	10.43	1471.
500	3.64	34.09	496	27.12	99.1	7.12	15.15	1472.
600	3.46	34.16	595	27.20	92.8	8.07	20.51	1473.
800	3.10	34.28	793	27.33	81.2	9.80	32.81	1475.
1000	2.82	34.35	990	27.41	74.4	11.36	47.02	1477.
1200	2.59	34.41	1188	27.48	68.6	12.78	62.98	1480.





## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 1- 12

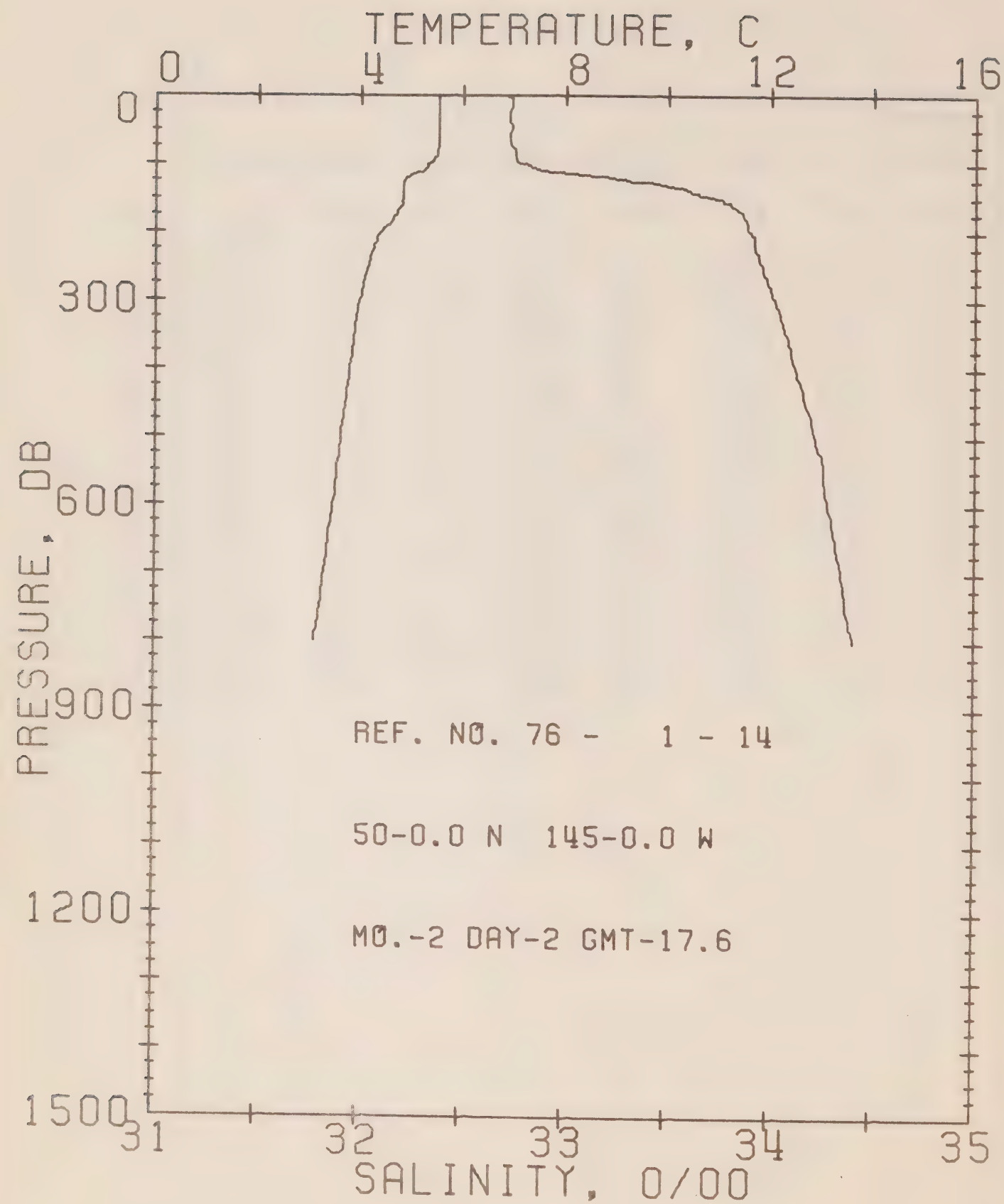
DATE 31/ 1/76

POSITION 50- 0.0N, 145- 0.0W

GMT 21.5

RESULTS OF STD CAST 345 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.54	32.67	0	25.79	221.2	0.0	0.0	1470.
10	5.54	32.68	10	25.80	220.8	0.22	0.01	1470.
20	5.55	32.68	20	25.80	221.0	0.44	0.05	1471.
30	5.55	32.68	30	25.80	221.1	0.66	0.10	1471.
50	5.55	32.69	50	25.81	220.5	1.10	0.28	1471.
75	5.53	32.69	75	25.81	220.6	1.66	0.63	1471.
100	5.48	32.70	99	25.82	219.6	2.21	1.12	1472.
125	4.82	33.40	124	26.45	160.1	2.68	1.67	1470.
150	4.79	33.76	149	26.74	132.7	3.04	2.17	1471.
175	4.61	33.84	174	26.82	125.3	3.36	2.70	1471.
200	4.41	33.87	199	26.87	121.2	3.67	3.29	1470.
225	4.23	33.89	223	26.90	118.0	3.97	3.94	1470.
250	4.11	33.92	248	26.94	114.7	4.26	4.64	1470.
300	3.96	33.97	298	27.00	109.8	4.82	6.21	1470.
400	3.77	34.09	397	27.11	99.7	5.87	9.93	1471.
500	3.58	34.19	496	27.21	91.2	6.82	14.29	1472.
600	3.41	34.25	595	27.27	85.5	7.70	19.23	1473.
800	3.13	34.35	793	27.38	76.5	9.32	30.73	1475.
1000	2.83	34.43	990	27.47	68.5	10.77	44.02	1477.
1200	2.57	34.49	1188	27.54	62.4	12.07	58.64	1480.



## OFFSHORE OCEANOGRAPHY GROUP

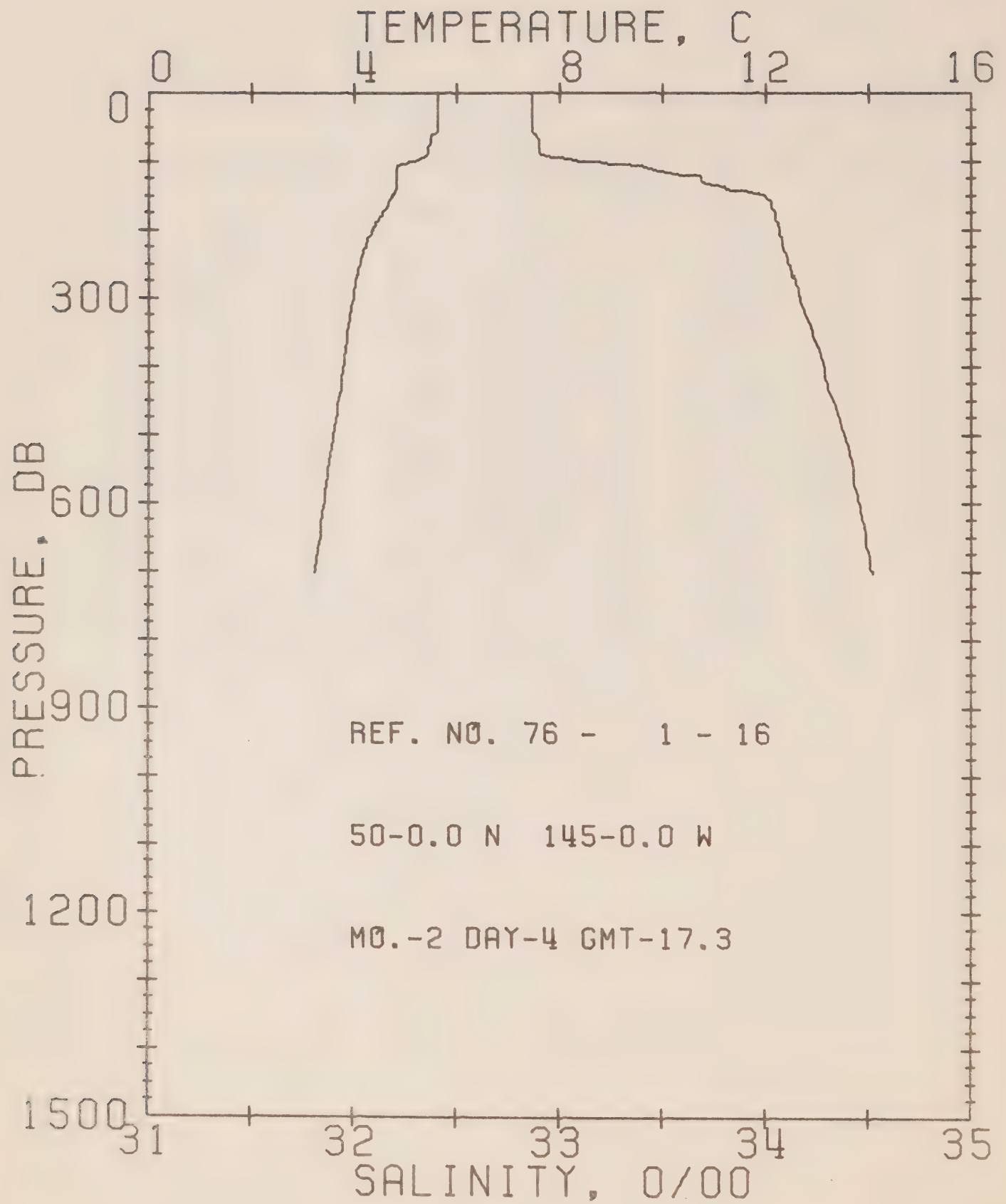
REFERENCE NO. 76- 1- 14

DATE 2/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.6

RESULTS OF STD CAST 257 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.53	32.72	0	25.83	217.3	0.0	0.0	1470.
10	5.51	32.74	10	25.85	215.9	0.22	0.01	1470.
20	5.51	32.74	20	25.85	216.3	0.43	0.04	1470.
30	5.51	32.73	30	25.84	216.9	0.65	0.10	1471.
50	5.51	32.74	50	25.85	216.3	1.08	0.28	1471.
75	5.52	32.74	75	25.85	216.9	1.63	0.62	1471.
100	5.34	32.78	99	25.90	211.9	2.16	1.10	1471.
125	4.85	33.33	124	26.39	165.6	2.65	1.65	1470.
150	4.82	33.74	149	26.72	134.8	3.01	2.17	1471.
175	4.68	33.87	174	26.84	123.8	3.34	2.70	1471.
200	4.41	33.90	199	26.89	118.8	3.64	3.28	1470.
225	4.24	33.92	223	26.93	115.8	3.93	3.91	1470.
250	4.15	33.96	248	26.97	112.0	4.22	4.60	1470.
300	3.99	34.02	298	27.03	106.3	4.76	6.13	1470.
400	3.90	34.12	397	27.13	97.7	5.78	9.75	1471.
500	3.64	34.22	496	27.23	89.5	6.71	14.02	1472.
600	3.48	34.28	595	27.29	84.0	7.57	18.85	1473.
800	3.11	34.41	793	27.43	71.8	9.13	29.93	1475.





## OFFSHORE OCEANOGRAPHY GROUP

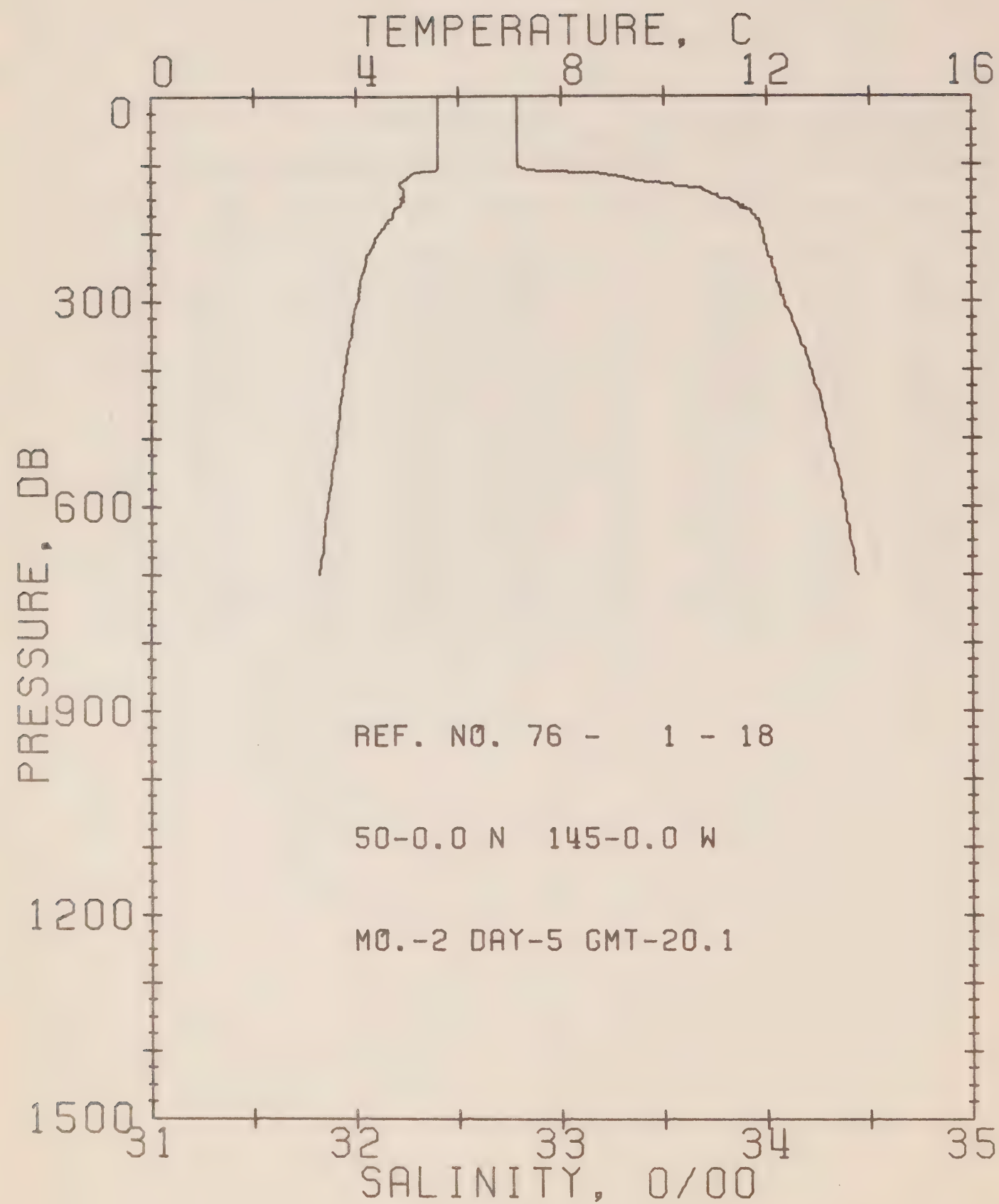
REFERENCE NO. 76- 1- 16

DATE 4/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STD CAST 277 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.64	32.86	0	25.93	208.1	0.0	0.0	1471.
10	5.63	32.87	10	25.94	207.5	0.21	0.01	1471.
20	5.63	32.87	20	25.94	207.6	0.42	0.04	1471.
30	5.63	32.87	30	25.94	207.7	0.62	0.10	1471.
50	5.62	32.87	50	25.94	207.8	1.04	0.26	1472.
75	5.47	32.90	75	25.98	204.2	1.55	0.59	1471.
100	5.21	33.10	99	26.17	186.5	2.05	1.04	1471.
125	4.83	33.69	124	26.68	138.4	2.44	1.48	1471.
150	4.74	34.00	149	26.94	114.4	2.77	1.94	1471.
175	4.56	34.05	174	27.00	109.0	3.05	2.40	1471.
200	4.36	34.07	199	27.03	105.6	3.32	2.91	1470.
225	4.23	34.08	223	27.06	103.8	3.58	3.48	1470.
250	4.12	34.11	248	27.09	100.2	3.83	4.09	1470.
300	3.99	34.17	298	27.15	95.1	4.32	5.46	1471.
400	3.80	34.29	397	27.26	85.4	5.22	8.67	1472.
500	3.61	34.38	496	27.36	76.8	6.04	12.40	1473.
600	3.42	34.45	595	27.44	70.4	6.77	16.51	1473.



## OFFSHORE OCEANOGRAPHY GROUP

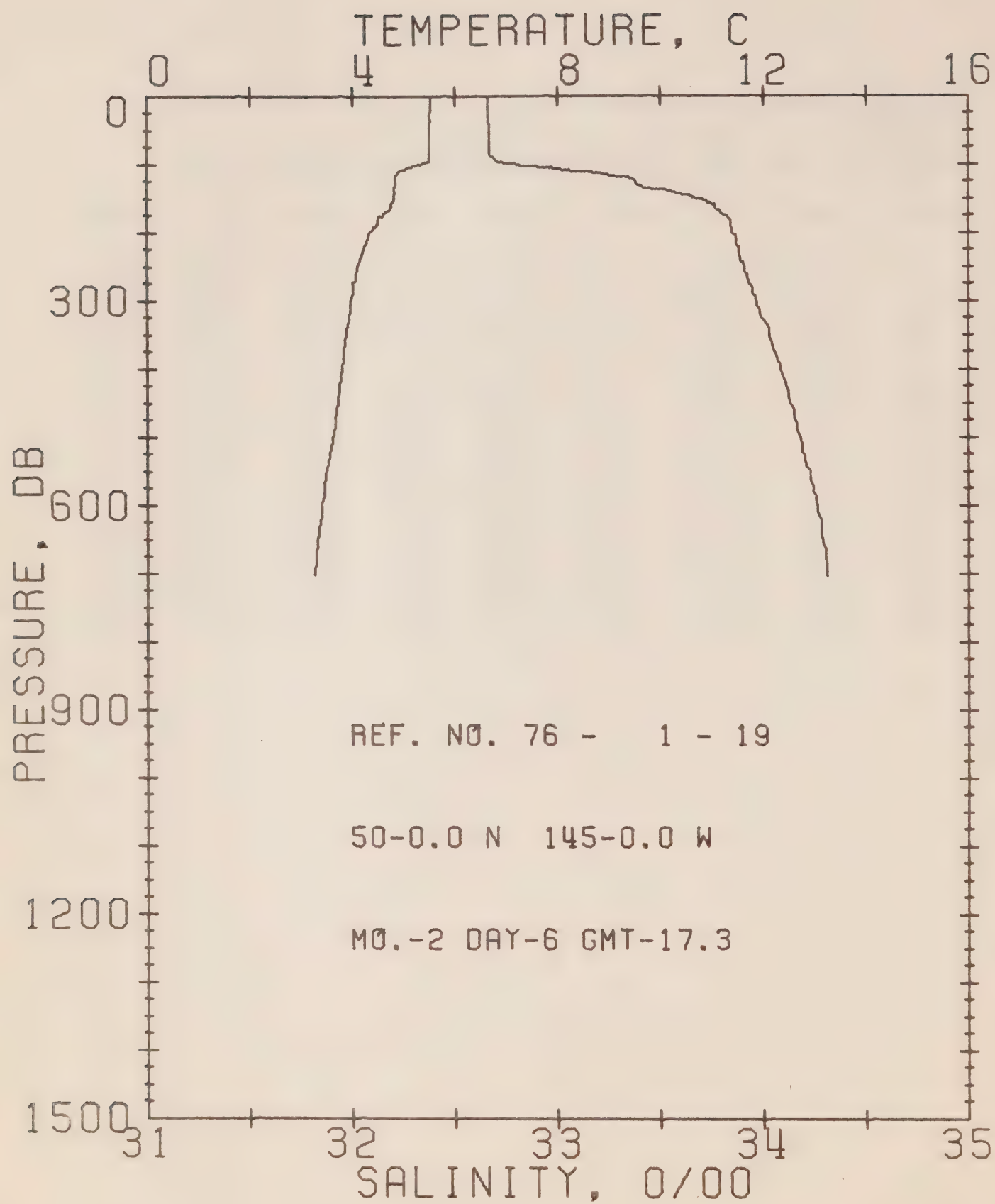
REFERENCE NO. 76- 1- 18

DATE 5/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 20.1

RESULTS OF STP CAST 266 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.61	32.78	0	25.87	213.7	0.0	0.0	1471.
10	5.61	32.79	10	25.88	213.3	0.21	0.01	1471.
20	5.61	32.79	20	25.88	213.4	0.43	0.04	1471.
30	5.61	32.79	30	25.88	213.5	0.64	0.10	1471.
50	5.60	32.79	50	25.88	213.6	1.07	0.27	1471.
75	5.59	32.79	75	25.88	213.8	1.60	0.61	1472.
100	5.59	32.79	99	25.88	214.1	2.14	1.09	1472.
125	4.90	33.42	124	26.46	159.4	2.61	1.63	1471.
150	4.89	33.78	149	26.75	132.5	2.97	2.13	1471.
175	4.72	33.95	174	26.90	118.2	3.28	2.64	1471.
200	4.46	33.98	199	26.95	113.5	3.57	3.19	1471.
225	4.29	34.00	223	26.99	110.4	3.85	3.80	1470.
250	4.17	34.03	248	27.02	107.1	4.12	4.46	1470.
300	4.02	34.09	298	27.09	101.4	4.64	5.92	1471.
400	3.79	34.21	397	27.21	90.6	5.60	9.33	1471.
500	3.63	34.30	496	27.29	83.3	6.46	13.29	1473.
600	3.44	34.38	595	27.37	76.1	7.26	17.74	1473.





## OFFSHORE OCEANOGRAPHY GROUP

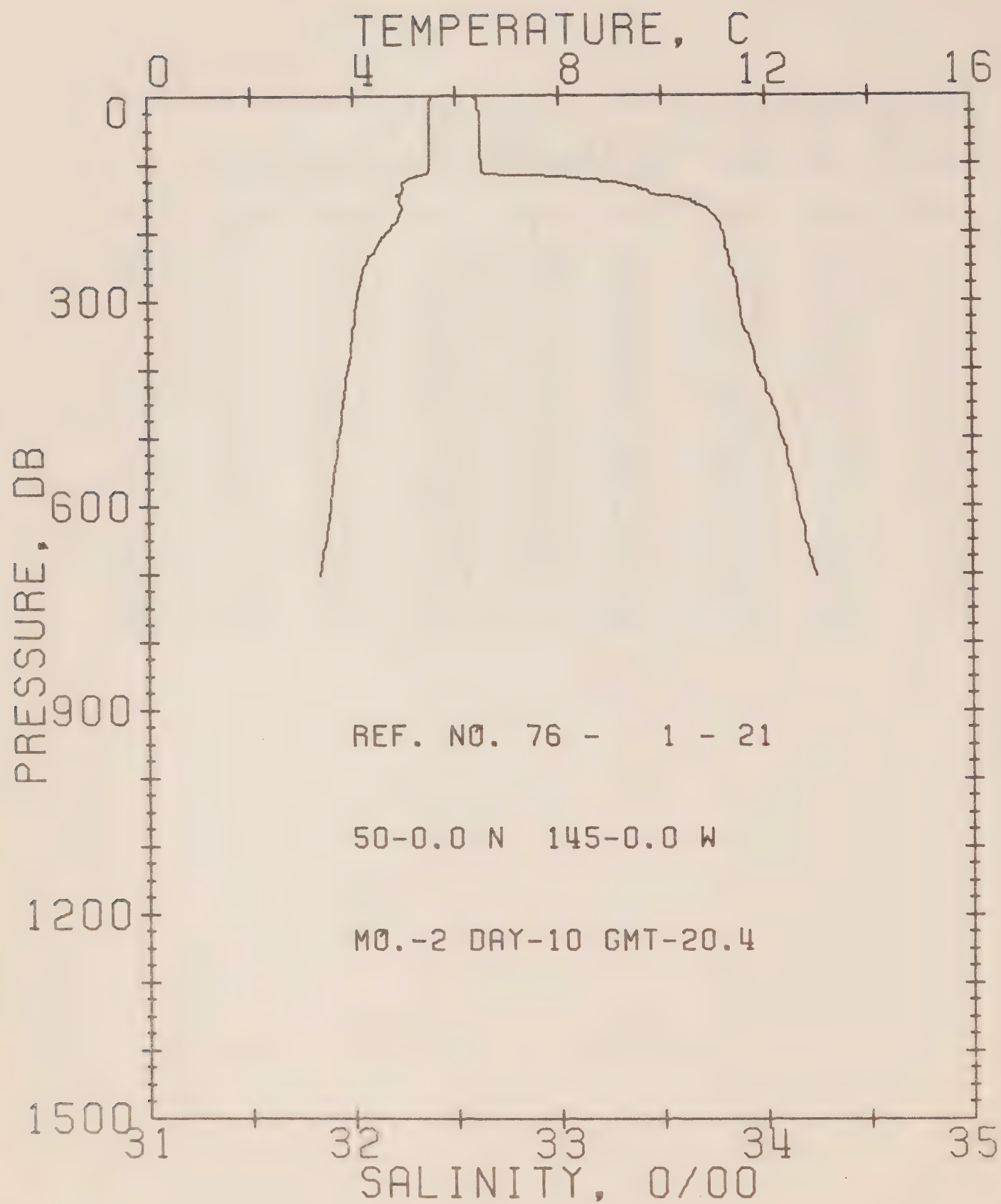
REFERENCE NO. 76- 1- 19

DATE 6/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 287 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	PJT. EN	SOUND
0	5.52	32.66	0	25.79	221.8	0.0	0.0	1470.
10	5.51	32.66	10	25.79	221.9	0.22	0.01	1470.
20	5.51	32.66	20	25.79	222.0	0.44	0.05	1470.
30	5.50	32.66	30	25.79	222.0	0.67	0.10	1470.
50	5.50	32.67	50	25.80	221.5	1.11	0.28	1471.
75	5.49	32.67	75	25.80	221.7	1.66	0.64	1471.
100	5.33	32.80	99	25.92	210.4	2.21	1.13	1471.
125	4.83	33.38	124	26.44	161.6	2.67	1.64	1470.
150	4.80	33.68	149	26.68	139.1	3.04	2.17	1471.
175	4.55	33.83	174	26.82	125.3	3.38	2.72	1470.
200	4.33	33.85	199	26.86	121.8	3.68	3.31	1470.
225	4.20	33.88	223	26.90	118.4	3.98	3.96	1470.
250	4.09	33.91	248	26.94	115.2	4.28	4.67	1470.
300	3.96	33.96	298	26.99	110.3	4.84	6.25	1470.
400	3.78	34.08	397	27.10	100.6	5.89	9.99	1471.
500	3.61	34.18	496	27.20	92.1	6.85	14.39	1472.
600	3.40	34.26	595	27.28	84.9	7.74	19.34	1473.



## OFFSHORE OCEANOGRAPHY GROUP

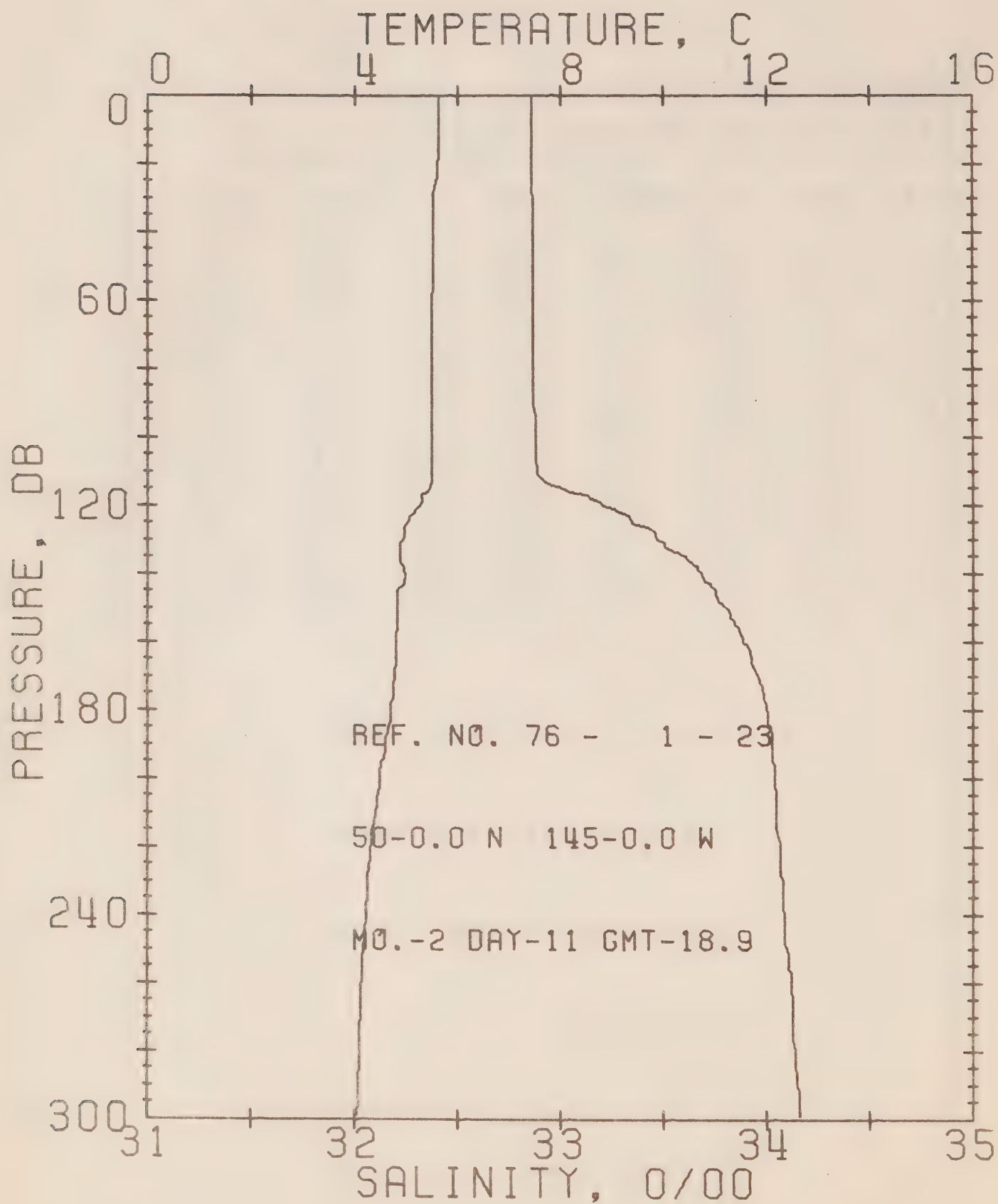
REFERENCE NO. 76- 1- 21

DATE 10/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 20.4

RESULTS OF STP CAST 259 POINTS TAKEN FROM ANALOG TRACE

DEFS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.52	32.60	0	25.74	226.2	0.0	0.0	1470.
10	5.50	32.61	10	25.75	225.6	0.23	0.01	1470.
20	5.50	32.61	20	25.75	225.7	0.45	0.05	1470.
30	5.49	32.62	30	25.76	224.9	0.68	0.10	1470.
50	5.49	32.62	50	25.76	225.1	1.13	0.29	1471.
75	5.48	32.62	75	25.76	225.3	1.69	0.65	1471.
100	5.48	32.63	99	25.77	224.8	2.25	1.15	1471.
125	5.01	33.20	124	26.27	177.1	2.78	1.75	1471.
150	4.92	33.60	149	26.60	146.3	3.18	2.31	1471.
175	4.90	33.75	174	26.72	135.5	3.53	2.89	1472.
200	4.64	33.80	199	26.79	123.9	3.86	3.52	1471.
225	4.43	33.81	223	26.82	125.7	4.18	4.21	1471.
250	4.22	33.83	248	26.86	122.6	4.49	4.96	1470.
300	4.06	33.87	298	26.91	118.1	5.09	6.63	1470.
400	3.89	33.96	397	27.00	110.6	6.23	10.72	1472.
500	3.70	34.07	496	27.11	100.9	7.28	15.53	1473.
600	3.54	34.16	595	27.19	93.9	8.25	20.96	1474.





## OFFSHORE OCEANOGRAPHY GROUP

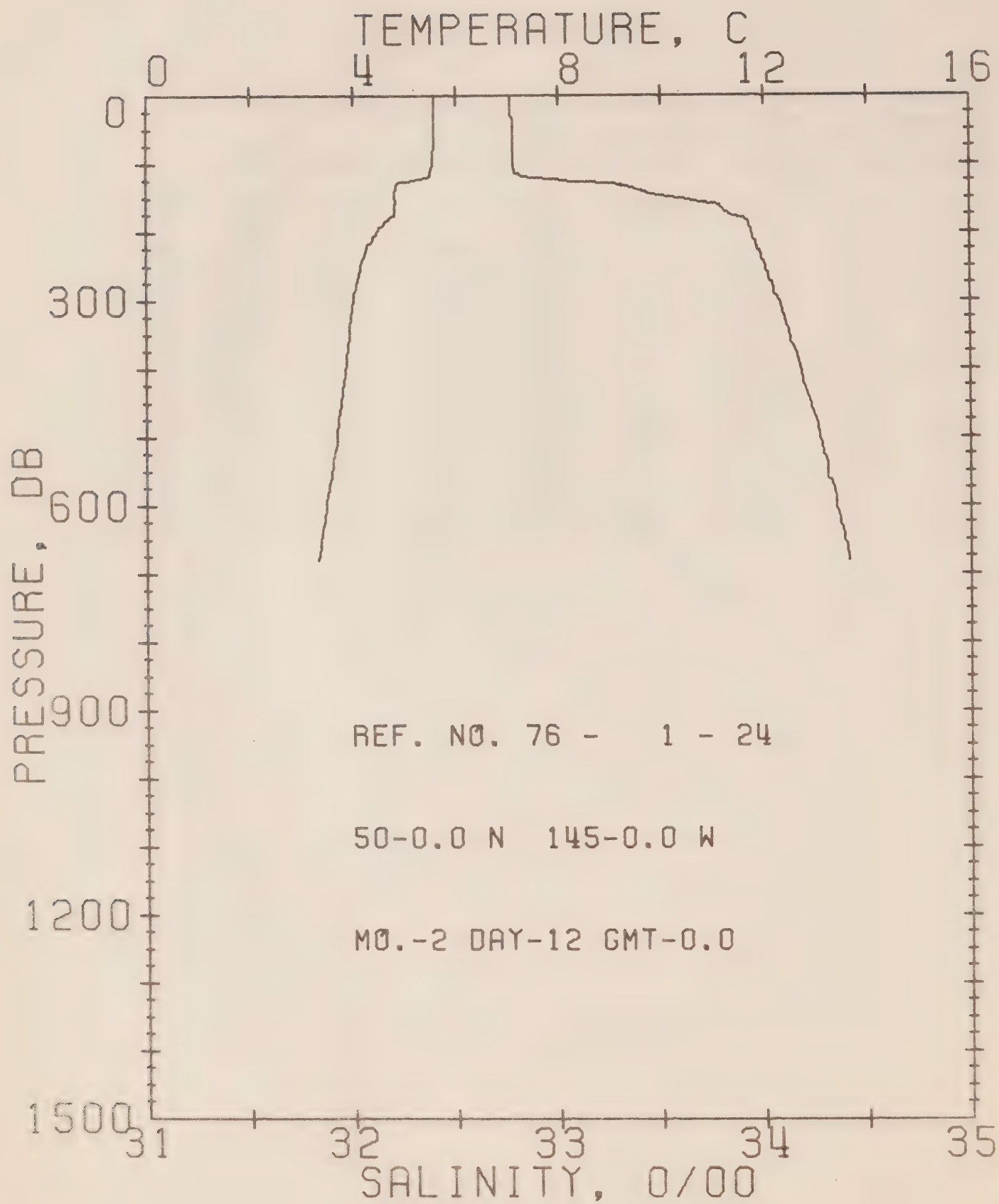
REFERENCE NO. 76- 1- 23

DATE 11/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 18.9

RESULTS OF STP CAST 194 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.64	32.86	0	25.93	208.1	0.0	0.0	1471.
10	5.62	32.86	10	25.93	208.2	0.21	0.01	1471.
20	5.60	32.86	20	25.94	208.2	0.42	0.04	1471.
30	5.53	32.87	30	25.95	206.6	0.62	0.10	1471.
50	5.51	32.87	50	25.96	206.7	1.04	0.26	1471.
75	5.50	32.87	75	25.96	206.7	1.55	0.59	1471.
100	5.49	32.88	99	25.97	206.2	2.07	1.05	1472.
125	5.01	33.35	124	26.39	165.8	2.56	1.61	1471.
150	4.82	33.81	149	26.78	129.5	2.92	2.11	1471.
175	4.75	33.99	174	26.93	115.6	3.22	2.62	1471.
200	4.48	34.04	199	27.00	109.1	3.50	3.15	1471.
225	4.27	34.07	223	27.04	104.9	3.77	3.73	1470.
250	4.15	34.10	248	27.08	101.6	4.03	4.36	1470.



## OFFSHORE OCEANOGRAPHY GROUP

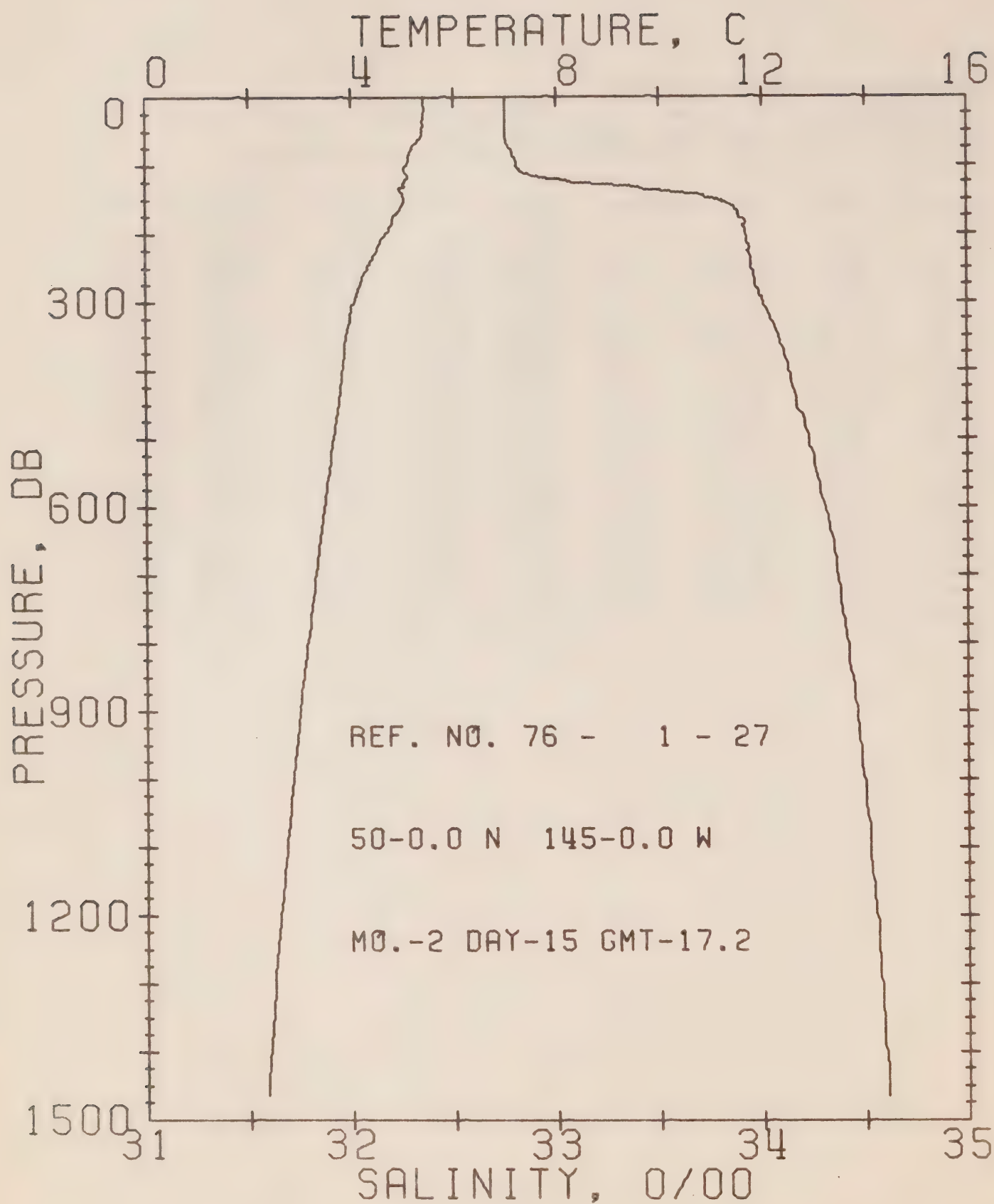
REFERENCE NO. 76- 1- 24

DATE 12/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 0.0

RESULTS OF STP CAST 261 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.56	32.76	0	25.86	214.7	0.0	0.0	1470.
10	5.56	32.77	10	25.87	214.2	0.21	0.01	1471.
20	5.56	32.77	20	25.87	214.3	0.43	0.04	1471.
30	5.56	32.77	30	25.87	214.4	0.64	0.10	1471.
50	5.56	32.78	50	25.88	213.9	1.07	0.27	1471.
75	5.56	32.78	75	25.88	214.2	1.61	0.61	1472.
100	5.54	32.78	99	25.88	214.2	2.14	1.09	1472.
125	5.73	33.06	124	26.16	187.8	2.67	1.69	1471.
150	4.81	33.57	149	26.59	147.4	3.07	2.26	1471.
175	4.79	33.84	174	26.81	126.9	3.41	2.81	1471.
200	4.45	33.94	199	26.92	116.3	3.70	3.38	1471.
225	4.23	33.97	223	26.97	112.1	3.99	4.00	1470.
250	4.13	34.01	248	27.01	108.2	4.26	4.67	1470.
300	4.00	34.07	298	27.07	102.7	4.79	6.14	1470.
400	3.84	34.18	397	27.17	93.9	5.78	9.64	1472.
500	3.68	34.27	496	27.26	86.0	6.67	13.76	1473.
600	3.48	34.35	595	27.35	78.8	7.50	18.36	1474.





## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 1- 27

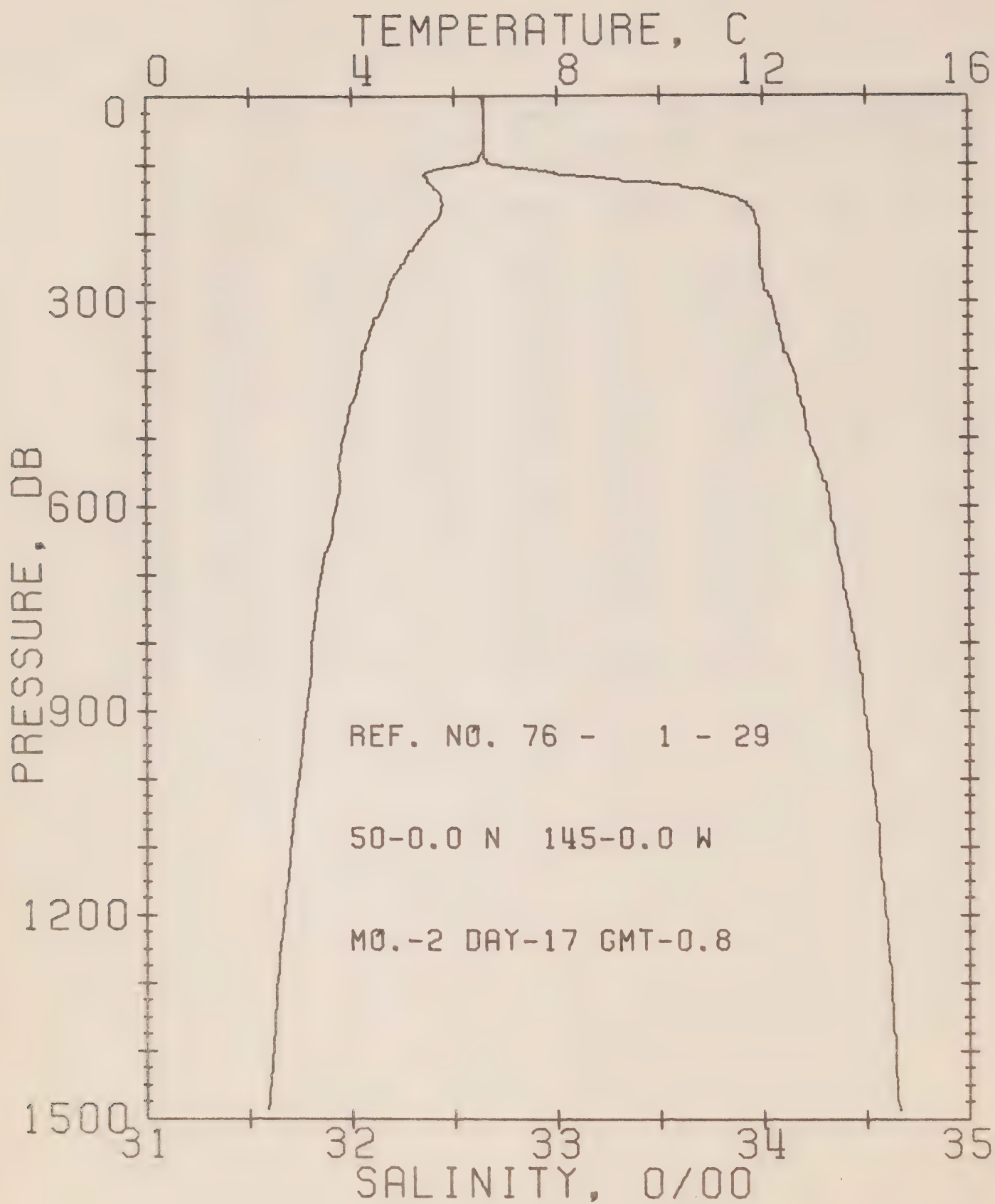
DATE 15/ 2/76

POSITION 50- 0.0N, 145- 0.0W

GMT 17.2

RESULTS OF STD CAST 395 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.42	32.75	0	25.87	213.9	0.0	0.0	1470.
10	5.42	32.75	10	25.87	214.2	0.21	0.01	1470.
20	5.43	32.75	20	25.87	214.4	0.43	0.04	1470.
30	5.42	32.75	30	25.87	214.4	0.64	0.10	1470.
50	5.39	32.75	50	25.87	214.2	1.07	0.27	1470.
75	5.19	32.78	75	25.92	210.0	1.60	0.61	1470.
100	5.10	32.81	99	25.95	207.1	2.13	1.09	1470.
125	5.05	33.09	124	26.18	185.8	2.63	1.65	1471.
150	5.03	33.73	149	26.73	134.1	3.02	2.19	1472.
175	4.83	33.89	174	26.84	123.9	3.34	2.72	1472.
200	4.67	33.92	199	26.88	120.1	3.64	3.30	1471.
225	4.49	33.93	223	26.91	117.7	3.94	3.95	1471.
250	4.31	33.95	248	26.94	114.6	4.23	4.65	1471.
300	4.05	34.01	298	27.02	107.7	4.78	6.21	1471.
400	3.82	34.13	397	27.14	97.2	5.80	9.83	1471.
500	3.65	34.23	496	27.23	88.8	6.74	14.11	1473.
600	3.47	34.30	595	27.31	82.1	7.59	18.90	1473.
800	3.14	34.42	793	27.43	71.7	9.12	29.79	1476.
1000	2.86	34.49	990	27.52	64.1	10.48	42.19	1478.
1200	2.59	34.55	1188	27.59	53.1	11.70	55.89	1490.



## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 75- 1- 29

DATE 17/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 0.8

RESULTS OF STD CAST 495 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.59	32.64	0	25.64	235.7	0.0	0.0	1474.
10	6.59	32.64	10	25.64	236.1	0.24	0.01	1474.
20	6.59	32.65	20	25.65	235.5	0.47	0.05	1475.
30	6.59	32.65	30	25.65	235.6	0.71	0.11	1475.
50	6.59	32.65	50	25.65	235.8	1.13	0.30	1475.
75	6.59	32.65	75	25.65	236.2	1.77	0.68	1476.
100	6.26	32.69	99	25.72	229.4	2.36	1.20	1475.
125	5.50	33.32	124	26.31	173.6	2.86	1.77	1473.
150	5.77	33.88	149	26.72	135.2	3.23	2.29	1475.
175	5.71	33.96	174	26.79	128.8	3.56	2.84	1475.
200	5.42	33.99	199	26.85	123.5	3.87	3.44	1475.
225	5.18	33.99	223	26.88	120.9	4.18	4.10	1474.
250	4.95	33.99	248	26.91	118.6	4.48	4.82	1474.
300	4.64	34.04	298	26.98	111.6	5.05	6.44	1473.
400	4.18	34.14	397	27.11	99.9	6.11	10.20	1473.
500	3.82	34.23	496	27.21	90.9	7.07	14.56	1473.
600	3.70	34.33	595	27.31	82.8	7.93	19.42	1474.
800	3.20	34.44	793	27.45	70.4	9.46	30.28	1476.
1000	2.95	34.53	990	27.54	62.4	10.79	42.41	1478.
1200	2.66	34.59	1188	27.61	56.1	11.97	55.62	1480.





Surface Salinity and Temperature Observations  
(P-76-1)

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS  
CRUISE REFERENCE NUMBER 76- 1

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	C	WEST
76	1	10	620	30.201	7.8	125-32
76	1	10	815	30.382	7.8	126- 0
76	1	10	1200	32.314		126-40
76	1	10	1432	32.355		127-40
76	1	10	1805	32.421	7.7	128-40
76	1	10	2320	31.906	7.7	129-40
76	1	11	315	32.440		130-40
76	1	11	1040	32.446	7.6	131-40
76	1	11	1510	32.446	7.2	132-40
76	1	11	1832	32.466	7.0	133-40
76	1	11	2200	32.493	7.0	134-40
76	1	12	115	32.502	7.1	135-40
76	1	12	440	32.498	6.8	136-40
76	1	12	800	32.522	6.5	137-40
76	1	12	1100	32.575	6.3	138-40
76	1	12	1425	32.661	6.8	139-40
76	1	12	1745	32.574	6.2	140-40
76	1	12	2055	32.592	6.0	141-40
76	1	13	19	32.619	6.0	142-36
76	1	13	440	32.613	6.2	143-40
76	1	14	0	32.625	5.8	ON STATION
76	1	15	0	32.628	5.8	ON STATION
76	1	16	0	32.610	5.9	ON STATION
76	1	17	0	32.614	5.8	ON STATION
76	1	18	0	32.609	6.1	ON STATION
76	1	19	0	32.617	5.9	ON STATION
76	1	20	0	32.598	6.0	ON STATION
76	1	21	0	32.642	5.8	ON STATION
76	1	22	0	32.659	5.5	ON STATION
76	1	23	0	32.695	5.1	ON STATION
76	1	24	0	32.641	5.6	ON STATION
76	1	25	0	32.632	5.7	ON STATION
76	1	26	0	32.624	5.8	ON STATION
76	1	27	0	32.674	5.4	ON STATION
76	1	28	0	32.654	5.7	ON STATION
76	1	29	0	32.647	5.5	ON STATION
76	1	30	0	32.621	5.9	ON STATION
76	1	31	0	32.645	5.5	ON STATION
76	2	1	0	32.626	5.7	ON STATION
76	2	2	0	32.608	5.6	ON STATION
76	2	3	0	32.615	5.7	ON STATION
76	2	4	0	32.606	5.7	ON STATION
76	2	5	0	32.636	5.7	ON STATION
76	2	6	0	32.621	5.8	ON STATION

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS  
CRUISE REFERENCE NUMBER 76- 1

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	C	WEST
76	2	7	0	32.641	5.8	ON STATION
76	2	8	0	32.610	6.0	ON STATION
76	2	9	0	32.629	5.7	ON STATION
76	2	10	0	32.649	5.7	ON STATION
76	2	11	0	32.642	5.7	ON STATION
76	2	12	0	32.625	5.7	ON STATION
76	2	13	0	32.632	5.7	ON STATION
76	2	14	0	32.632	5.7	ON STATION
76	2	15	0	32.626	5.7	ON STATION
76	2	16	215	32.605	5.9	143-40
76	2	16	625	32.614	6.1	142-45
76	2	16	915	32.611	5.9	141-40
76	2	16	1210	32.556	6.0	140-40
76	2	16	1520	32.558	6.4	139-40
76	2	16	1758	32.496	6.2	138-40
76	2	16	2038	32.489	6.6	137-40
76	2	16	2300	32.513	6.6	136-40
76	2	17	423	32.494		135-40
76	2	17	719	32.494		134-40
76	2	17	1002	32.529		133-40
76	2	17	1255	32.464		132-40









CAI EP321  
-76R24

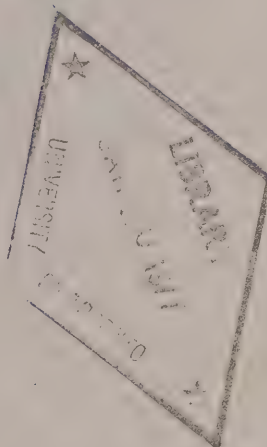
Government  
of Canada  
Publication

# OCEANOGRAPHIC OBSERVATIONS AT OCEAN STATION P

(50° N., 145° W.)

Volume 72

13 February - 12 May 1976



INSTITUTE OF OCEAN SCIENCES, PATRICIA BAY  
Victoria, B.C.

For additional copies or further information, please write to:

Environment Canada

Institute of Ocean Sciences, Patricia Bay

512 - 1230 Government Street

Victoria, B. C.

V8W 1Y4



CA 111321  
-76R24

*Pacific Marine Science Report 76-24*

OCEANOGRAPHIC OBSERVATIONS AT OCEAN STATION P (50°N, 145°W)

Volume 72

13 February - 12 May 1976

Institute of Ocean Sciences, Patricia Bay  
Victoria, B.C.

November, 1976

This is a manuscript which has received only limited circulation. On citing this report in a bibliography, the title should be followed by the words "UNPUBLISHED MANUSCRIPT" which is in accordance with accepted bibliographic custom.

### ABSTRACT

Physical, chemical and biological oceanographic observations are made from the weathership at Ocean Weather Station Papa, and between Esquimalt and Station Papa, on a routine continuing basis. Physical oceanography data only are shown, including profiles obtained with bottle casts, and conductivity-temperature-pressure instruments. Surface observations are also shown.





## INTRODUCTION

Canadian operation of Ocean Weather Station P (Latitude  $50^{\circ}00'N$ , Longitude  $145^{\circ}00'W$ ) was inaugurated in December, 1950. The station is occupied primarily to make meteorological observations of the surface and upper air and to provide an air-sea rescue service. The station is manned by two vessels operated by the Marine Services Branch of the Ministry of Transport. They are the CCGS **Vancouver** and the CCGS **Quadra**. Each ship remains on station for a period of six weeks, and is then relieved by the alternate ship, thus maintaining a continuous watch.

Bathythermograph observations have been made at Station P since July 1952. A program of more extensive oceanographic observations commenced in August 1956. This was extended in April 1959, by the addition of a series of oceanographic stations along the route to and from Station P and Swiftsure Bank. These stations are known as Line P stations. The number of stations on Line P has been increased twice and now consists of twelve stations (Fig. 1). Bathythermograph observations and surface salinity sample collections, in addition to being made on Line P oceanographic stations, are also made at odd meridians at  $40'$ , i.e.  $139^{\circ}40'W$ ,  $141^{\circ}40'W$ , etc. These stations are known as Line P BT stations. Data observed prior to 1968 has been indexed by Collins et al. (1969).

The present record includes hydrographic, continuously sampled STP and surface salinity and temperature data collected from the CCGS **Vancouver** during the period 13 February to 31 March, 1976; hydrographic and surface salinity and temperature data collected from the CCGS **Quadra** during the period 26 March to 12 May 1976.

All physical oceanographic data have been stored by the Canadian Oceanographic Data Centre (CODC), 615 Booth Street, Ottawa, Ontario, Canada. Requests for these data should be directed to CODC.

Biological and productivity data are published in the Manuscript Report series of the Fisheries Research Board of Canada (FRB), the Pacific Biological Station, Nanaimo, British Columbia, Canada. Requests for these data should be directed to FRB.

Marine geochemical data are for the Ocean Chemistry Group, Ocean and Aquatic Sciences, Environment Canada, 512 - 1230 Government Street, Victoria, British Columbia, Canada.

PROGRAM OF OBSERVATIONS FROM CCGS VANCOUVER, 13 FEBRUARY - 31 MARCH 1976  
(P-76-2) (CODC Ref. No. 15-76-002)

Oceanographic observations were made by Ms. W.E. Grant of Chemex Labs Ltd., North Vancouver, B.C.

En route to Station P, Line P Stations 1 and 6-9 were occupied and an STP profile made; Station 1 to near bottom, Stations 6-9 to 1500 metres. All other stations were missed due to rough weather.

Salinity, nitrate, alkalinity and total CO<sub>2</sub> samples were taken from the seawater loop at Stations 1, 6-9.

The thermosalinograph and the surface temperature recorder were run continuously.

Surface temperature and salinity bucket samples were obtained at Stations 2-5, and Stations 7½-12½.

Mechanical BT or XBT's were taken at all Line P and BT stations.

A surface tarball tow was made at Station 6.

At Station P the oceanographic program was carried out as follows:

I. Physical Oceanography

- 1) Profiles of salinity, temperature and oxygen were obtained from 6 hydrographic stations to near bottom (4200 metres).
- 2) 35 STP profiles to 1500 metres and 1 to 100, 1 to 120 and 1 to 375 metres were obtained.
- 3) BT's were taken every three hours to coincide with meteorological observations, encoded and transmitted according to the IGOSS format.
- 4) Salinity samples daily at 0000 hrs GMT from the seawater loop or from a bucket when loop was not operational.

II. Marine Geochemistry

- 1) Samples for nutrients, tritium, alkalinity and total CO<sub>2</sub> were obtained from 6 depths to 500 metres. Nutrient, and salinity samples were also collected daily at 0000 hrs GMT and once every hour for a 24 hour period from the seawater loop. A single tritium bucket sample was also taken.
- 2) Alkalinity and total CO<sub>2</sub> samples every 3 days from the seawater loop.
- 3) Air CO<sub>2</sub> samples weekly in quadruplicate except for the period 27 February - 2 March 1976.

- 4) 2 seawater C-14 samples were extracted from 45 gallons from the seawater loop in conjunction with Air C-13 samples. Also collected at this time were seawater C-13, total CO<sub>2</sub> and alkalinity samples.
- 5) 6 surface tarball tows of 15 minutes duration each were made at a speed of 4 knots.
- 6) The PCO<sub>2</sub> system was operated whenever the seawater loop was operational.

### III. Biological and Productivity

Samples were obtained as follows:

- 1) 6 - 150 metre vertical plankton hauls  
2 - 1200 metre vertical plankton hauls  
9 - Surface plankton tows for 10 minutes at sundown.
- 2) Samples for plant pigments and nitrates were obtained from 3 hydrocasts to 200 metres. C-14 productivity samples were taken only on the first 2 of these 200 m casts. On alternate weeks to the hydrocasts samples for these 3 parameters were taken using a surface bucket only.
- 3) Secchi disc measurements were done weekly.

On February 27, 1976, began a run to Quatsino. During both inbound and outbound phases of this run, the thermosalinograph and surface temperature recorders were run continuously. At intervals of 1° of longitude temperature and salinity samples were extracted from the seawater loop with XBT's being taken at 2° intervals.

En route from Station P, all the full stations were sampled for surface salinity, temperature, nutrients, alkalinity and total CO<sub>2</sub>. Surface temperature and salinity were also taken every half station. The surface temperature and thermosalinograph recorders were run continuously on Line P. BT's STD's were done for full stations 6 - 1.

### PROGRAM OF OBSERVATIONS FROM CCGS QUADRA, 26 MARCH - 12 MAY 1976 (P-76-3) (CODC Ref. No. 15-76-003)

Oceanographic observations were made by Mr. L. E. Taufen of Seakem Oceanography Ltd., Victoria, B. C.

En route to Station P all stations were cancelled because of very rough seas. Salinity and nitrate samples were taken from the seawater loop at all Line P stations. The PCO<sub>2</sub> system, the thermosalinograph and surface temperature recorders were run continuously on Line P.

At Station P the oceanographic program was carried out as follows:

### I. Physical Oceanography

- 1) Profiles of salinity and temperature were obtained from 6 hydrographic stations; 3 to 500 m, 1 to 600 m, 1 to 1000 m, and 1 to 2000 m.
- 2) Mechanical BT's were taken every three hours to coincide with meteorological observations. During rough weather an XBT was taken at 0000 hrs GMT.
- 3) Salinity samples were taken daily from the seawater loop at 0000 hrs GMT.

### II. Marine Geochemistry

- 1) Profiles to 500 m of alkalinity, tritium and nutrients were obtained as well as an alkalinity profile to 600 m.
- 2) Nutrient samples from the seawater loop were collected daily at 0000 hrs GMT and once each hour for a 24 hour period. A surface bucket tritium sample was also taken.
- 3) Alkalinity and total CO<sub>2</sub> samples were taken every 3 days from the seawater loop.
- 4) Air CO<sub>2</sub> samples were taken weekly in quadruplicate.
- 5) Seawater C-14 samples were extracted from 45 gallons from the seawater loop taken in conjunction with air C-13 samples.
- 6) Seven 15 litre hydrocarbon samples were taken as well as eleven 1 gallon surface samples.
- 7) The PCO<sub>2</sub> system was run in manual mode only.
- 8) Five surface tarball tows of 15 minutes duration were made.

### III. Biological and Productivity

Samples were obtained as follows:

- 2 - 1200 m vertical plankton hauls.
- 6 - horizontal surface plankton tows of 10 minutes duration.

En route from Station P, surface salinity, temperature, and nitrate samples were collected at each station. XBT's were taken at each full and half station. The PCO<sub>2</sub> system, the thermosalinograph and surface temperature recorders were run continuously. Also collected were water samples for the Institute of Oceanography, U.B.C.



### Observations for Other Agencies

- 1) Marine mammal observations were made by the ship's officers for Mr. I. McAskie, Fisheries Research Board of Canada, Pacific Biological Station, Nanaimo, B.C., Canada.
- 2) Bird observations were made by the ship's officers for Dr. M. Myres, University of Alberta, Calgary, Alberta, Canada and Mr. J. Guiguet, Curator of Birds and Mammals, Provincial Museum, Department of Recreation and Conservation, Victoria, British Columbia, Canada.
- 3) Air CO<sub>2</sub> samples weekly in duplicate for Scripps Institution of Oceanography, La Jolla, San Diego, California, U.S.A.
- 4) Water samples from Line P for Ms. R. Waters, Institute of Oceanography, University of British Columbia, Vancouver, British Columbia, Canada.

Data was processed for publication by Ms. M. Sainsbury and Mr. R. Wiegand of Seakem Oceanography Ltd., Victoria, B.C.

### OBSERVATIONAL PROCEDURES

Observations for salinity, oxygen and temperature from all hydrographic casts, including the surface, were obtained with Niskin water sample bottles equipped with either Richter and Wiese and/or Yoshino Keiki Co. reversing thermometers. Two protected thermometers were used on all bottles, and one unprotected thermometer was used on each bottle at depths of 300 m or greater. The accuracy of protected reversing thermometers is believed to be  $\pm 0.02^{\circ}\text{C}$ .

The daily surface water temperatures were measured from a bucket sample using a deck thermometer of  $\pm 0.1^{\circ}\text{C}$  accuracy. The daily surface salinity samples were obtained from the seawater loop. When the seawater loop was not operational these samples were obtained with a bucket, and are indicated with a 'b' in this data record.

Salinity determinations were made aboard ship with either an Auto-lab Model 601 Mark III inductive salinometer or a Hytech Model 6220 lab salinometer. Accuracy using duplicate determinations is estimated to be  $\pm 0.003^{\circ}/\text{oo}$ .

Depth determinations were made using the "depth difference" method described in the U. S. N. Hydrographic Office Publication No. 607 (1955). Depth estimates have an approximate accuracy of  $\pm 5$  m for depths less than 1000 m, and  $\pm 0.5\%$  of depth for depths greater than 1000 m.

The dissolved oxygen analyses were done in the shipboard laboratory by a modified Winkler method (Carpenter, 1965).

Line P engine intake continuous temperatures on both ships were recorded by a Honeywell "Elektronik 15" Recorder. The temperature probe is at a depth of approximately 3 metres below the sea surface and the instrument accuracy is believed to be  $\pm 0.1^{\circ}\text{C}$ .

Each ship is equipped with a Plessey Model 6600-T thermosalinograph which is used, on Line P, for continuous recording of surface temperatures and salinities from the ship's seawater loop. The temperature probe is mounted at the seawater loop intake (approximately 3 metres below the surface) and the salinity probe and recorder are situated in the dry lab. The accuracy of this instrument is believed to be  $\pm 0.1^{\circ}\text{C}$  for temperature and  $\pm 0.1^{\circ}/\text{oo}$  for salinity.

STP profiles were taken with a Plessey Model 9006 STP system.

### COMPUTATIONS

All hydrographic data were processed with the aid of an IBM 370 computer. Reversing thermometer temperature corrections, thermometric depth calculations, and accepted depth from the "depth difference" method were computed. Extraneous thermometric depths caused by thermometer malfunctions are automatically edited and replaced. A Calcomp 565 Offline Plotter was used to plot temperature-salinity and temperature-oxygen diagrams, as well as plots of temperature, salinity, and dissolved oxygen vs  $\log_{10}$  depth. These plots were used to check the data for errors.

Missing hydrographic data were obtained using a weighted parabolas interpolation method (Reiniger and Ross, 1968). These data are indicated with an asterisk in this data record.

Data values which we suspect but which we have included in this data record are indicated with a plus. These data have been removed from punch card and magnetic tape records.

Analog records from the salinity-temperature-pressure instrument have been machine digitized, then replotted using the Calcomp plotter.

Digitization was continued until original and computer plotted traces were coincident. Temperature and salinity values were listed at standard pressures; integrals (depths, geopotential anomaly, and potential energy anomaly) were computed from the entire array of digitized data.

The headings for the data listings are explained as follows:

PRESS	is pressure (decibars)
TEMP	is temperature (degrees Celsius)
SAL	is salinity (parts per thousand)
DEPTH	is reported in metres
SIGMA-T	is specific gravity anomaly
SVA	is specific volume anomaly
THETA	is potential temperature (degrees Celsius)

SVA (THETA) is potential specific volume anomaly  
 DELTA D is geopotential anomaly (J/kg)  
 POT EN is potential energy in units of  $10^8$  ergs/cm<sup>2</sup>  
 OXY is the concentration of dissolved oxygen expressed in millilitres  
 per litre  
 B-V PERIOD is the Brunt-Vaisala period in minutes

#### REFERENCES

- Carpenter, J.H., 1965. The Chesapeake Bay Institute technique for the Winkler dissolved oxygen method. Limnol. and Oceanogr. 10: 141-143.
- Collins, C.A., R.L. Tripe, D.A. Healey and J. Joergensen, 1969. The time distribution of serial oceanographic data from the Ocean Station P programme. Fish. Res. Bd. Can. Tech. Rept. No. 106.
- Reiniger, R.F. and C.K. Ross, 1968. A method of interpolation with application to oceanographic data. Deep Sea Res. 15: 185-193.
- U.S.N. Hydrographic Office, 1955. Instruction Manual for oceanographic observations, Publ. No. 607.

#### LIST OF FIGURES

- Figure 1. Chart showing Line P station positions.
- Figure 2. Composite plot of temperature vs  $\log_{10}$  depth for Station P. P-76-2
- Figure 3. Composite plot of salinity vs  $\log_{10}$  depth for Station P. P-76-2
- Figure 4. Composite plot of oxygen vs  $\log_{10}$  depth for Station P. P-76-2
- Figure 5. Salinity difference between hydro data and STP. P-76-2
- Figure 6. Temperature difference between hydro data and STP. P-76-2
- Figure 7. Composite plot of temperature vs  $\log_{10}$  depth for Station P. P-76-3
- Figure 8. Composite plot of salinity vs  $\log_{10}$  depth for Station P. P-76-3

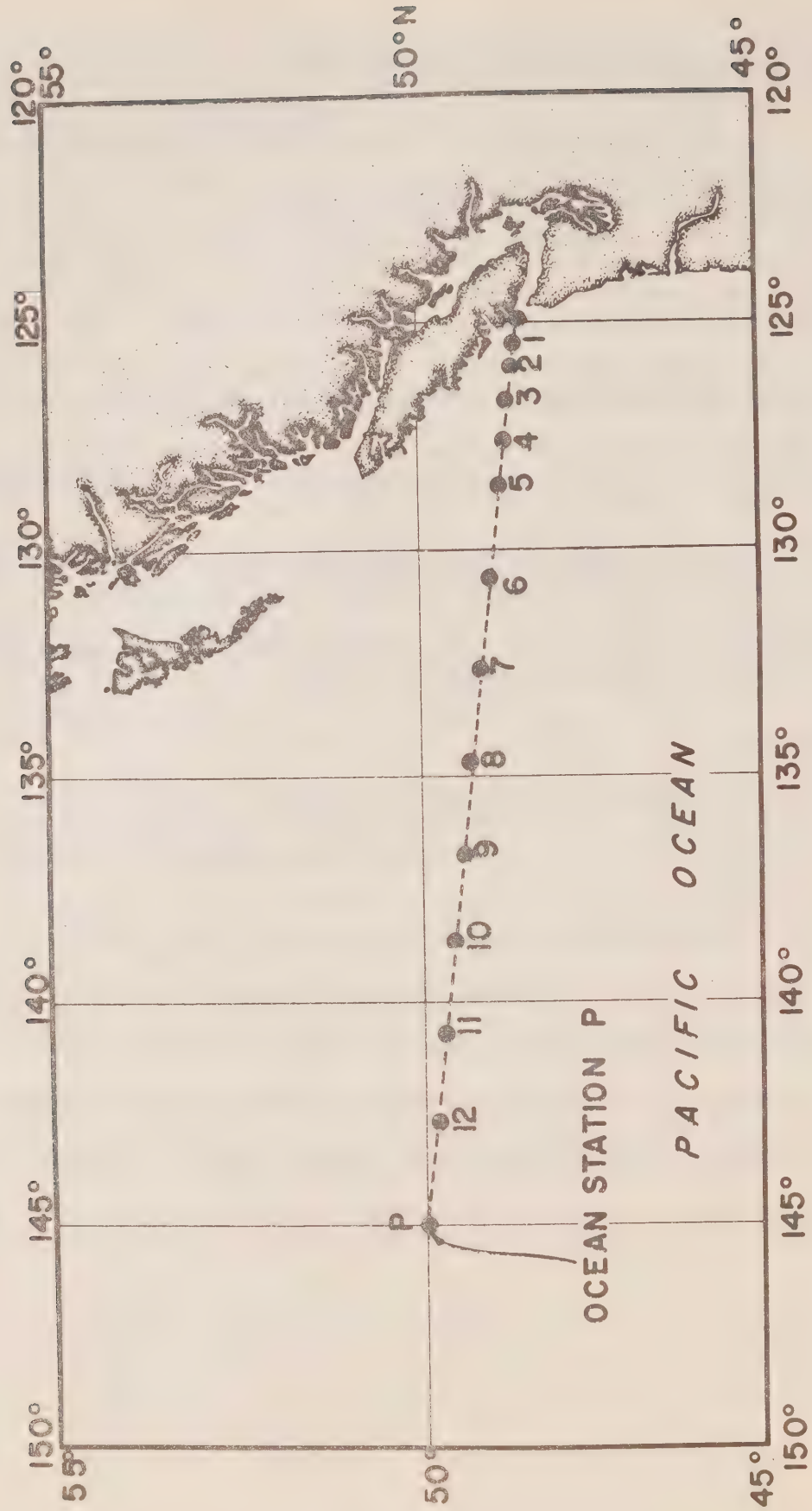


Fig. 1 Chart showing Line P station positions.



Oceanographic Data Obtained on Cruise P-76-2  
(CODC Reference No. 15-76-002)



Results of Hydrographic Observations  
(P-76-2)





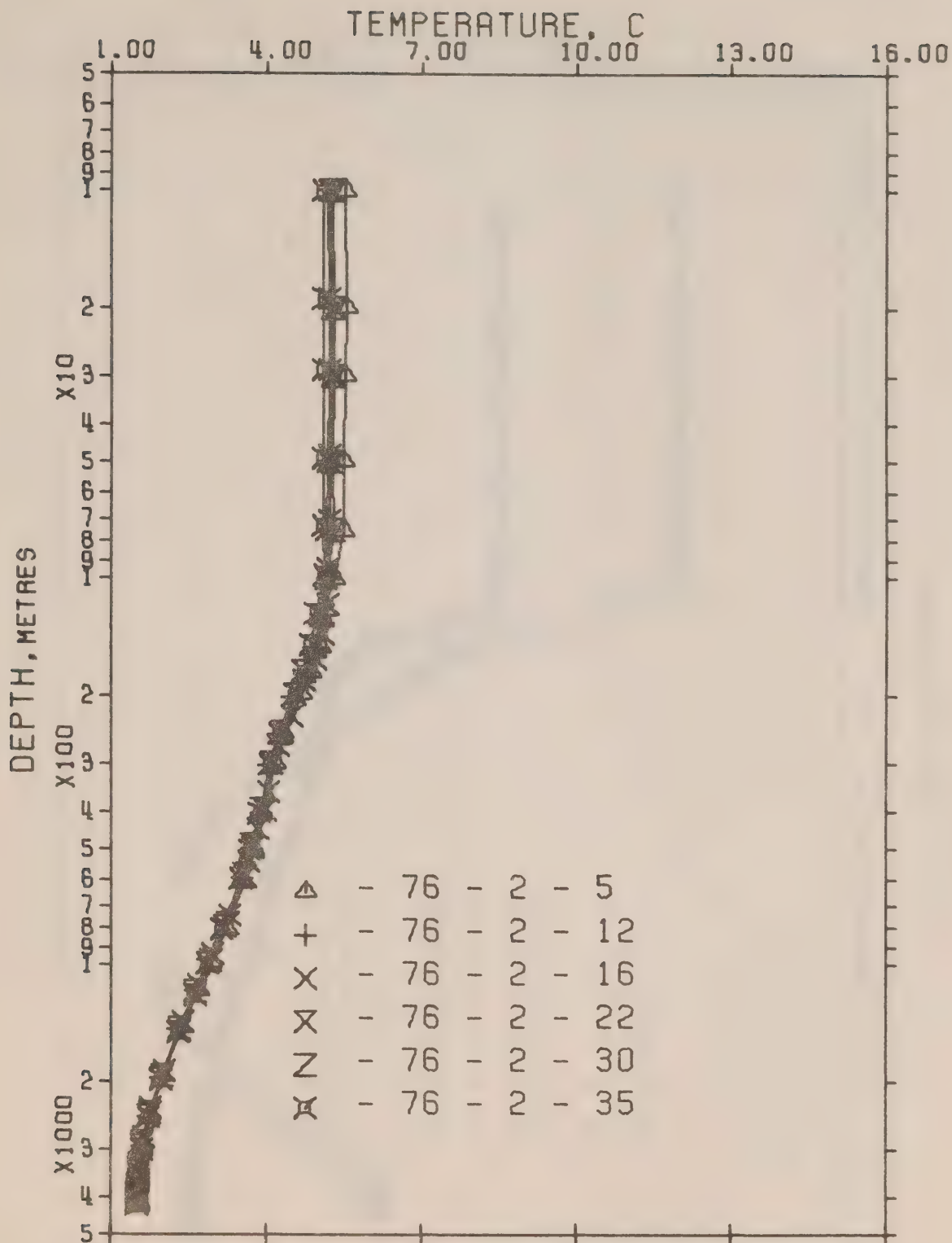


Fig. 2 Composite plot of temperature vs  $\log_{10}$  depth for Station P.  
P-76-2

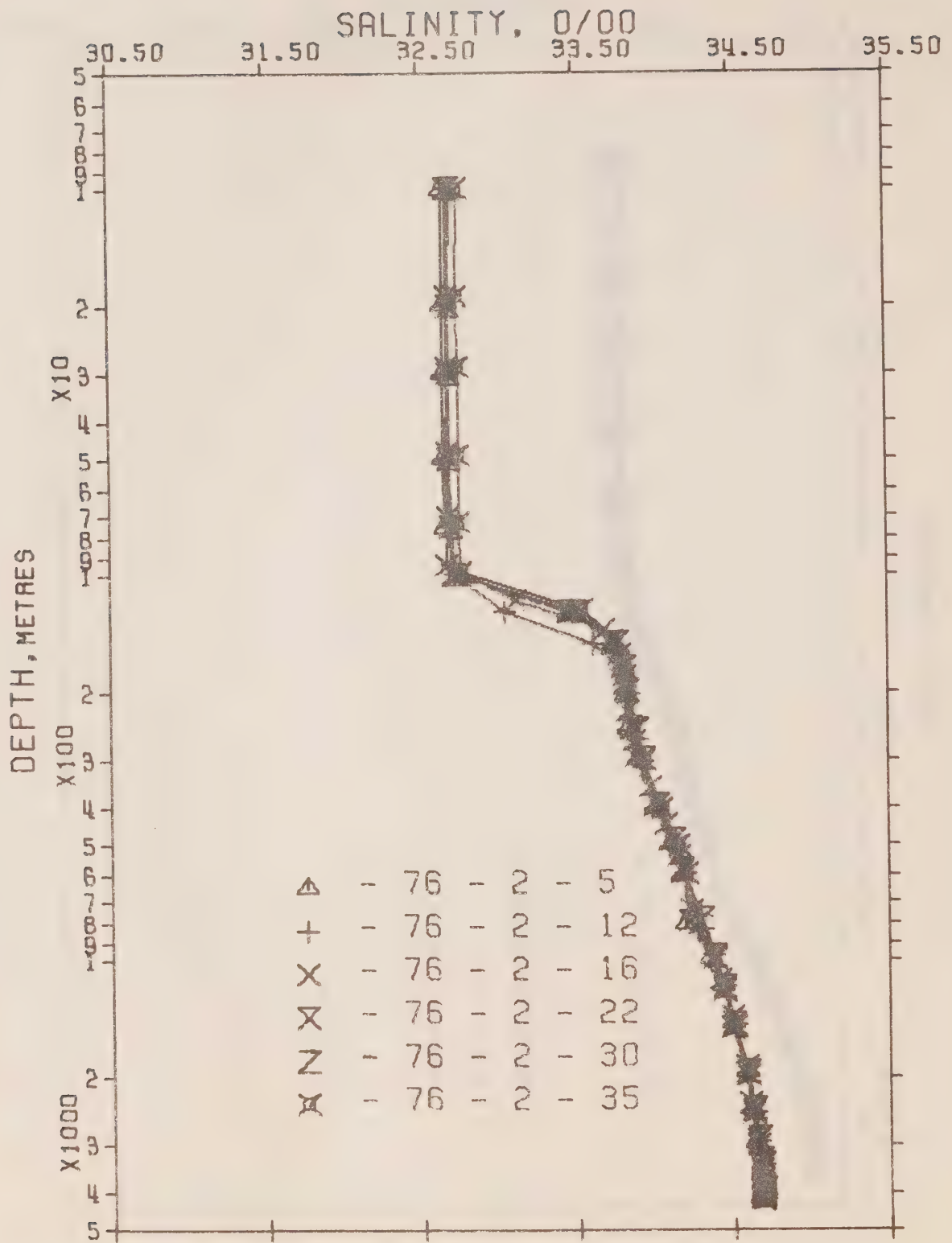


Fig. 3 Composite plot of salinity vs  $\log_{10}$  depth for Station P.  
P-76-2

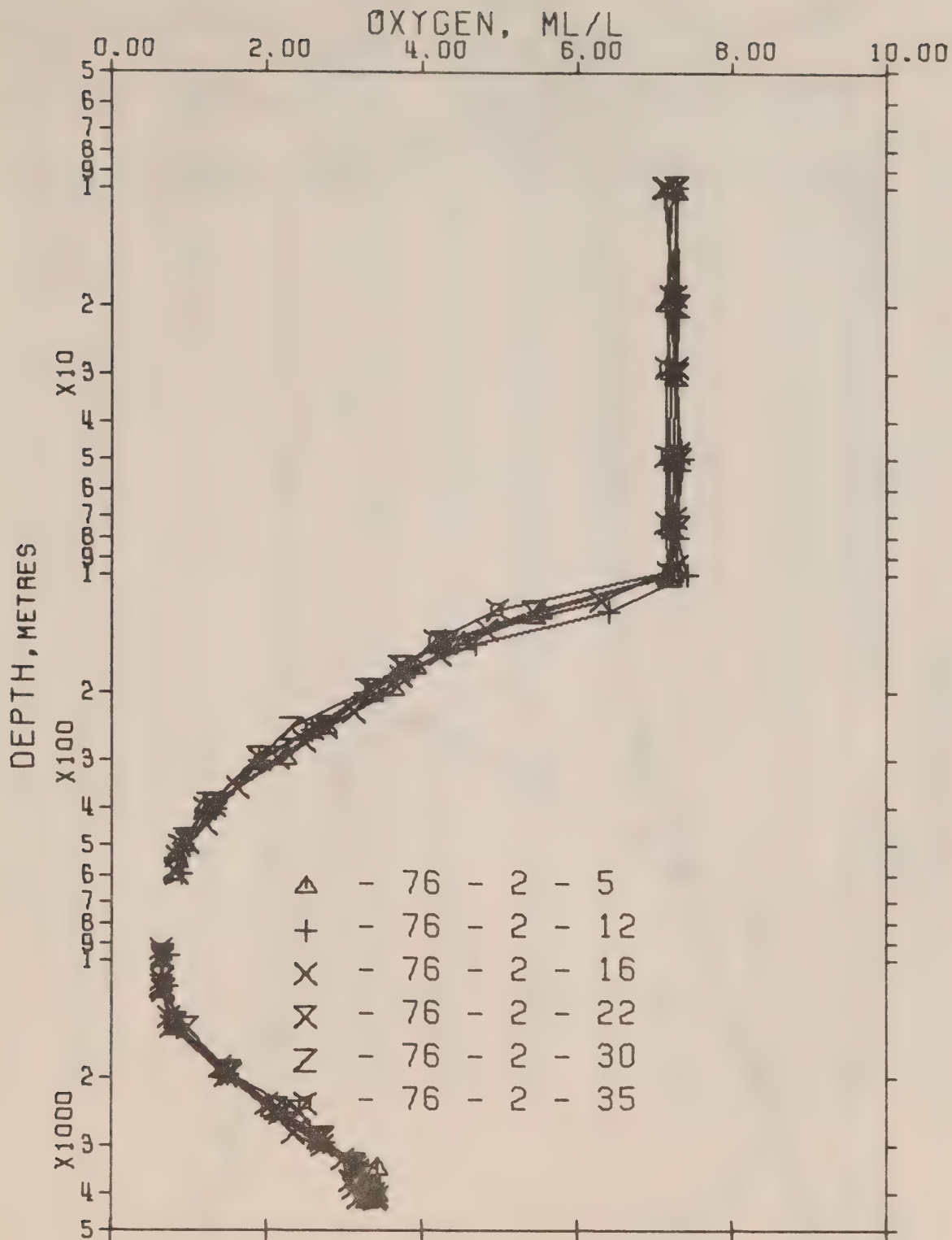
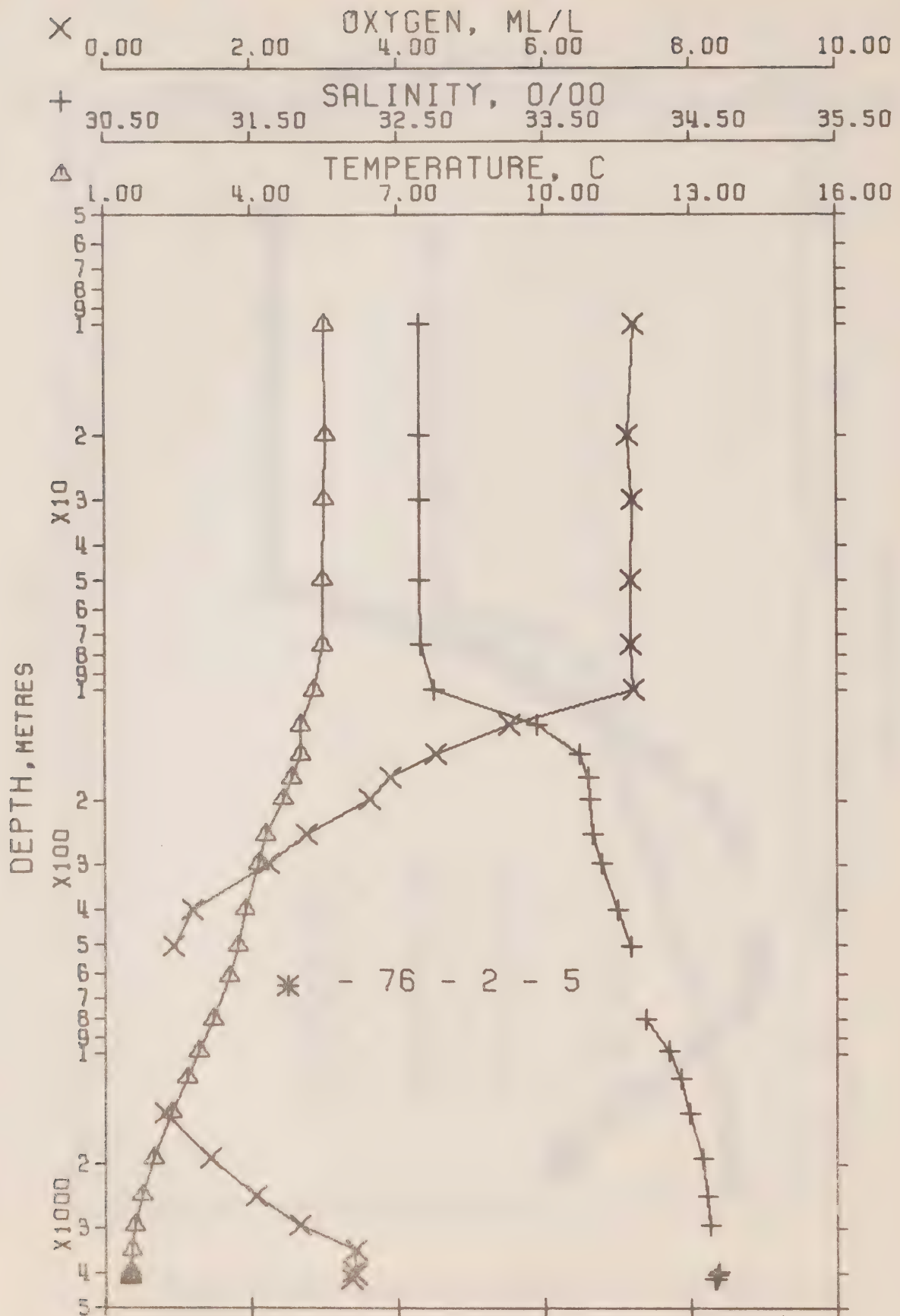


Fig. 4 Composite plot of oxygen vs  $\log_{10}$  depth for Station P.  
P-76-2





## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 2- 5

DATE 16/ 2/76

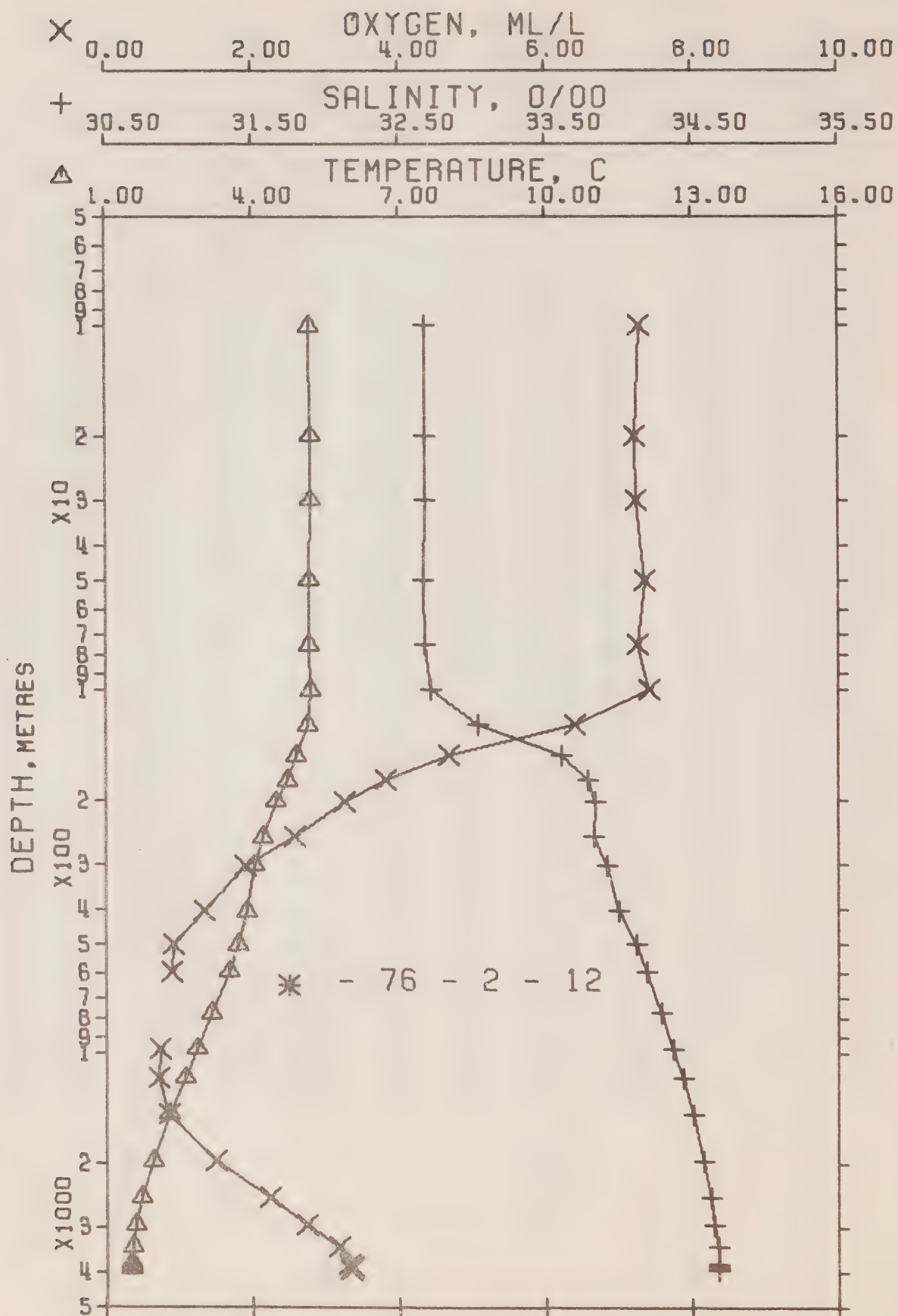
GMT 21.0

POSITION 50- 0.0 N, 145- 0.0 W

STATION P

## HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	5.51	32.648	0	25.780	222.7	5.51	222.5	0.0	0.0	7.21	1470.
10	5.51	32.649	10	25.781	222.7	5.51	222.4	0.22	0.01	7.22	1470.
20	5.52	32.648	20	25.779	223.1	5.52	222.5	0.45	0.05	7.15	1470.
30	5.49	32.648	30	25.782	222.8	5.49	222.3	0.67	0.10	7.19	1470.
50	5.48	32.653	50	25.787	222.6	5.48	221.8	1.12	0.29	7.18	1471.
75	5.48	32.663	75	25.795	222.0	5.47	221.1	1.68	0.65	7.19	1471.
100*	5.28	32.753	99	25.889	213.4	5.28	212.1	2.22	1.12	7.22	1471.
101	5.28	32.755	100	25.891	213.2	5.27	211.9	2.23	1.14	7.22	1471.
125*	5.04	33.434	124	26.455	159.9	5.03	158.3	2.70	1.67	5.57	1471.
126	5.03	33.455	125	26.473	158.2	5.02	156.7	2.71	1.69	5.52	1471.
150*	5.01	33.729	149	26.692	137.7	5.00	135.8	3.06	2.18	4.55	1472.
151	5.01	33.740	150	26.701	136.9	5.00	134.9	3.07	2.20	4.51	1472.
175	4.85	33.802	174	26.768	130.7	4.84	128.6	3.39	2.74	3.90	1472.
200	4.67	33.814	199	26.797	128.1	4.65	125.3	3.72	3.36	3.61	1471.
225*	4.48	33.824	225	26.826	125.5	4.46	123.0	4.03	4.03	3.17	1471.
250*	4.31	33.834	248	26.852	123.2	4.29	120.6	4.34	4.79	2.77	1471.
251	4.30	33.834	249	26.853	123.1	4.28	120.5	4.35	4.81	2.76	1471.
300*	4.15	33.887	298	26.910	118.1	4.13	115.0	4.94	6.47	2.26	1471.
301	4.15	33.888	299	26.912	118.0	4.13	114.9	4.96	6.52	2.24	1471.
400*	3.90	33.998	397	27.025	107.9	3.87	104.1	6.07	10.51	1.24	1472.
403	3.89	34.001	400	27.028	107.6	3.86	103.8	6.11	10.65	1.21	1472.
500*	3.75	34.087	497	27.111	100.5	3.72	95.9	7.11	15.28	0.96	1473.
508	3.74	34.094	504	27.117	99.9	3.70	95.3	7.20	15.70	0.94	1473.
600*	3.59	34.127	596	27.159	96.5	3.54	91.3	8.09	20.78	0.92	1474.
617	3.56	34.133	612	27.166	95.9	3.52	90.6	8.26	21.81		1474.
700*	3.41	34.158	700	27.200	93.0	3.36	87.3	9.04	27.05		1475.
800*	3.24	34.184	794	27.237	90.0	3.19	83.8	9.96	34.05		1476.
807	3.23	34.186	800	27.239	89.8	3.17	83.6	10.02	34.59		1476.
900*	3.07	34.275	896	27.325	82.1	3.01	75.4	10.82	41.56		1477.
990	2.93	34.352	980	27.399	75.4	2.86	68.3	11.53	48.31		1478.
1000*	2.91	34.357	991	27.405	74.9	2.85	67.8	11.60	49.10		1478.
1177	2.67	34.435	1165	27.488	67.5	2.59	59.8	12.86	63.02		1480.
1200*	2.64	34.440	1190	27.495	66.9	2.56	59.2	13.01	64.90		1480.
1466	2.35	34.490	1450	27.560	61.4	2.25	53.0	14.72	88.02	0.81	1483.
1500*	2.32	34.497	1489	27.567	60.7	2.22	52.1	14.92	91.16	0.86	1484.
1967	1.99	34.580	1943	27.661	52.7	1.85	43.1	17.54	137.33	1.44	1490.
2000*	1.97	34.582	1979	27.664	52.5	1.83	42.8	17.71	140.86	1.49	1491.
2483	1.75	34.611	2450	27.704	49.4	1.57	38.8	20.17	196.97	2.07	1498.
2500*	1.75	34.612	2468	27.705	49.4	1.57	38.7	20.25	199.09	2.09	1498.
3000*	1.61	34.634	2957	27.733	47.6	1.39	35.8	22.66	266.49	2.65	1506.
3005	1.61	34.634	2961	27.733	47.6	1.39	35.8	22.68	267.16	2.66	1506.
3500*	1.53	34.662	3447	27.761	45.8	1.26	32.8	25.01	344.12	3.38	1514.
3524	1.53	34.663	3469	27.762	45.8	1.26	32.7	25.12	348.09	3.41	1515.
4000*	1.51	34.686	3935	27.781	45.2	1.19	30.6	27.28	431.22	3.38	1523.
4032	1.51	34.687	3964	27.783	45.1	1.18	30.4	27.43	437.07	3.37	1523.
4100*	1.52	34.682	4031	27.778	45.8	1.18	30.7	27.74	449.92	3.41	1524.
4131	1.52	34.680	4061	27.776	46.0	1.18	30.9	27.88	455.93	3.43	1525.
4200*	1.52	34.671	4128	27.769	46.9	1.17	31.6	28.20	469.50	3.38	1526.
4221	1.52	34.668	4148	27.767	47.1	1.17	31.7	28.30	473.63	3.36	1527.
4230	1.52	34.658	4157	27.759	47.8	1.17	32.5	28.34	475.52		1527.



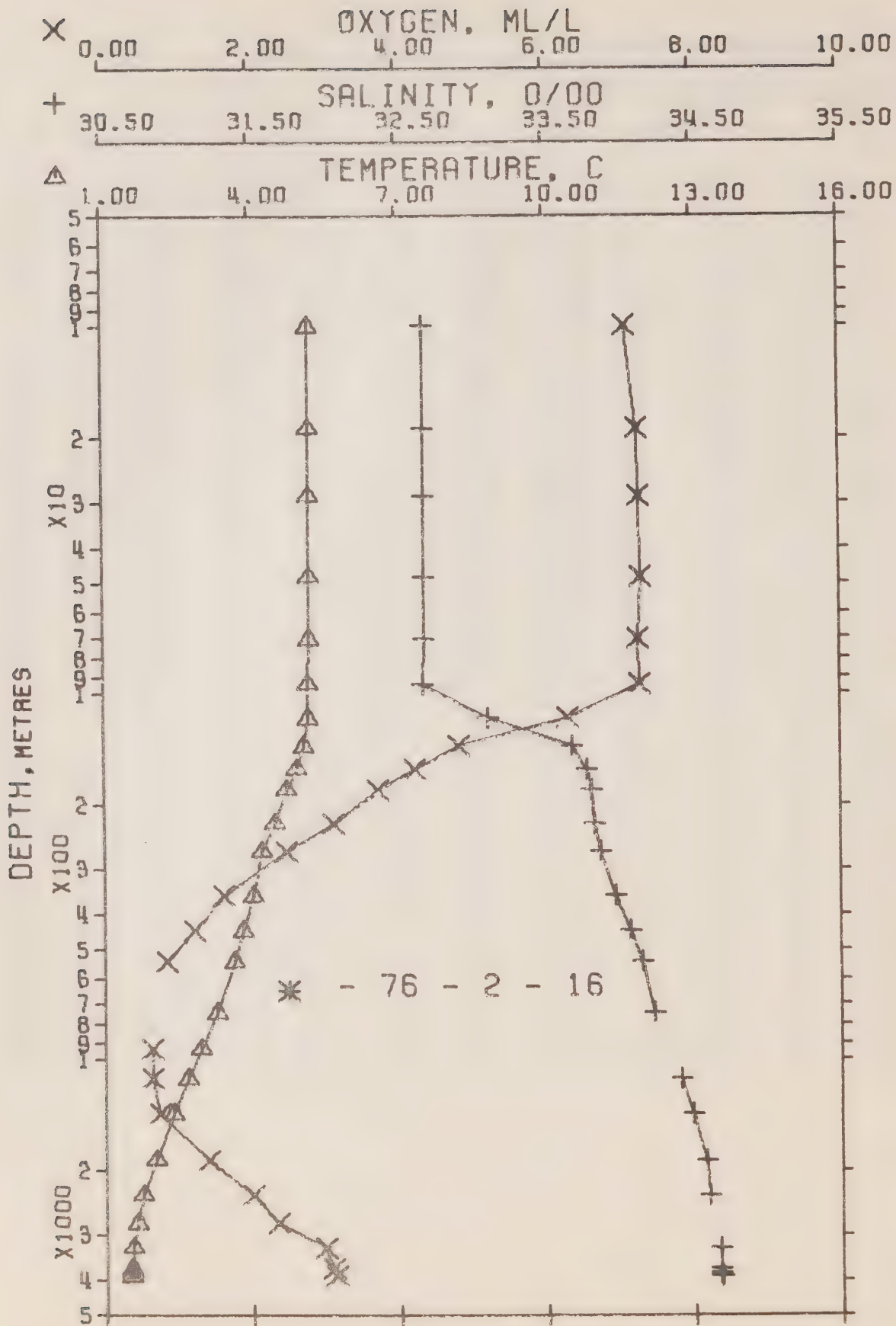
## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 2- 12 DATE 25/ 2/76 GMT 18.0

POSITION 50- 0.0 N, 145- 0.0 W STATION P

## HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SCUND
0	5.17	32.676	0	25.841	216.9	5.17	216.7	0.0	0.0	7.16	1469.
10	5.18	32.679	10	25.842	216.9	5.19	216.6	0.22	0.01	7.28	1469.
20	5.20	32.677	20	25.838	217.4	5.20	217.0	0.44	0.04	7.22	1469.
30	5.19	32.677	30	25.840	217.4	5.19	216.8	0.66	0.10	7.25	1469.
50	5.18	32.675	50	25.839	217.6	5.18	216.9	1.09	0.28	7.37	1469.
75	5.17	32.678	75	25.843	217.5	5.16	216.5	1.64	0.63	7.26	1470.
100*	5.21	32.717	99	25.869	215.2	5.20	214.0	2.17	1.11	7.41	1470.
101	5.21	32.718	100	25.870	215.2	5.20	213.9	2.19	1.12	7.41	1470.
125*	5.14	33.026	124	26.121	191.5	5.13	190.0	2.69	1.70	6.43	1471.
126	5.14	33.036	125	26.129	190.8	5.13	189.3	2.70	1.72	6.40	1471.
150*	4.93	33.566	149	26.573	149.0	4.91	147.2	3.12	2.30	4.81	1471.
152	4.91	33.607	151	26.607	145.7	4.90	143.9	3.15	2.35	4.69	1471.
175*	4.74	33.766	174	26.752	132.2	4.73	130.1	3.46	2.87	3.93	1471.
178	4.72	33.787	177	26.770	130.5	4.71	128.3	3.50	2.94	3.83	1471.
200*	4.50	33.834	199	26.831	124.8	4.49	122.5	3.78	3.48	3.34	1471.
203	4.47	33.841	202	26.840	124.0	4.45	121.6	3.82	3.57	3.26	1471.
225*	4.36	33.838	225	26.850	123.2	4.34	120.7	4.09	4.14	2.96	1470.
250*	4.24	33.835	249	26.860	122.4	4.22	119.7	4.40	4.89	2.64	1470.
255	4.22	33.835	253	26.862	122.2	4.20	119.6	4.45	5.04	2.58	1470.
300*	4.06	33.911	298	26.939	115.3	4.04	112.2	4.99	6.56	1.98	1471.
306	4.04	33.921	304	26.949	114.3	4.02	111.3	5.07	6.79	1.90	1471.
400*	3.90	33.994	398	27.022	108.2	3.87	104.4	6.10	10.51	1.38	1472.
408	3.89	34.000	405	27.027	107.7	3.86	103.9	6.19	10.88	1.34	1472.
500*	3.70	34.113	496	27.136	98.0	3.67	93.5	7.13	15.26	0.94	1473.
506	3.69	34.120	502	27.143	97.4	3.65	92.9	7.20	15.57	0.92	1473.
599	3.51	34.192	594	27.217	90.9	3.47	85.7	8.07	20.50	0.91	1473.
600*	3.51	34.193	595	27.218	90.8	3.47	85.7	8.08	20.55	0.91	1473.
700*	3.30	34.248	699	27.282	85.2	3.25	79.6	8.95	26.34	0.86	1474.
778	3.16	34.286	771	27.326	81.4	3.11	75.4	9.60	31.24		1475.
900*	3.12	34.296	795	27.337	80.4	3.07	74.3	9.78	32.67		1475.
900*	2.97	34.339	897	27.385	76.2	2.91	69.7	10.56	39.45		1476.
975	2.86	34.368	966	27.418	73.3	2.79	66.5	11.13	44.84	0.74	1477.
1000*	2.83	34.377	992	27.429	72.4	2.76	65.5	11.31	46.64	0.74	1477.
1177	2.61	34.439	1165	27.497	66.5	2.53	59.0	12.53	60.23	0.71	1479.
1200*	2.58	34.445	1190	27.504	66.0	2.50	58.4	12.68	62.08	0.72	1480.
1484	2.29	34.506	1468	27.577	59.6	2.19	51.2	14.46	96.45	0.87	1483.
1500*	2.28	34.509	1486	27.580	59.3	2.18	51.0	14.56	87.89	0.89	1484.
2000*	1.95	34.584	1976	27.666	52.2	1.81	42.6	17.29	136.52	1.50	1491.
2003	1.95	34.584	1979	27.667	52.2	1.81	42.5	17.31	136.89	1.50	1491.
2500*	1.73	34.625	2468	27.717	48.1	1.55	37.6	19.81	194.17	2.21	1498.
2517	1.72	34.626	2483	27.718	48.0	1.54	37.4	19.89	196.23	2.23	1498.
3000*	1.59	34.655	2957	27.751	45.8	1.37	34.1	22.17	260.59	2.73	1506.
3007	1.59	34.655	2963	27.751	45.7	1.37	34.1	22.20	261.53	2.74	1506.
3458	1.53	34.676	3404	27.772	44.7	1.26	31.7	24.21	327.56	3.18	1513.
3500*	1.53	34.676	3447	27.773	44.8	1.26	31.7	24.40	334.27	3.20	1514.
3957	1.51	34.677	3790	27.775	45.4	1.20	31.3	26.00	394.23	3.32	1520.
3924	1.50	34.681	3859	27.779	45.1	1.19	30.9	26.32	406.91	3.35	1521.
3985	1.52	34.681	3918	27.777	45.6	1.20	30.9	26.59	418.02	3.33	1522.
3992	1.51	34.682	3925	27.779	45.4	1.19	30.9	26.62	419.34		1523.





## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 2- 16

DATE 3/ 3/76

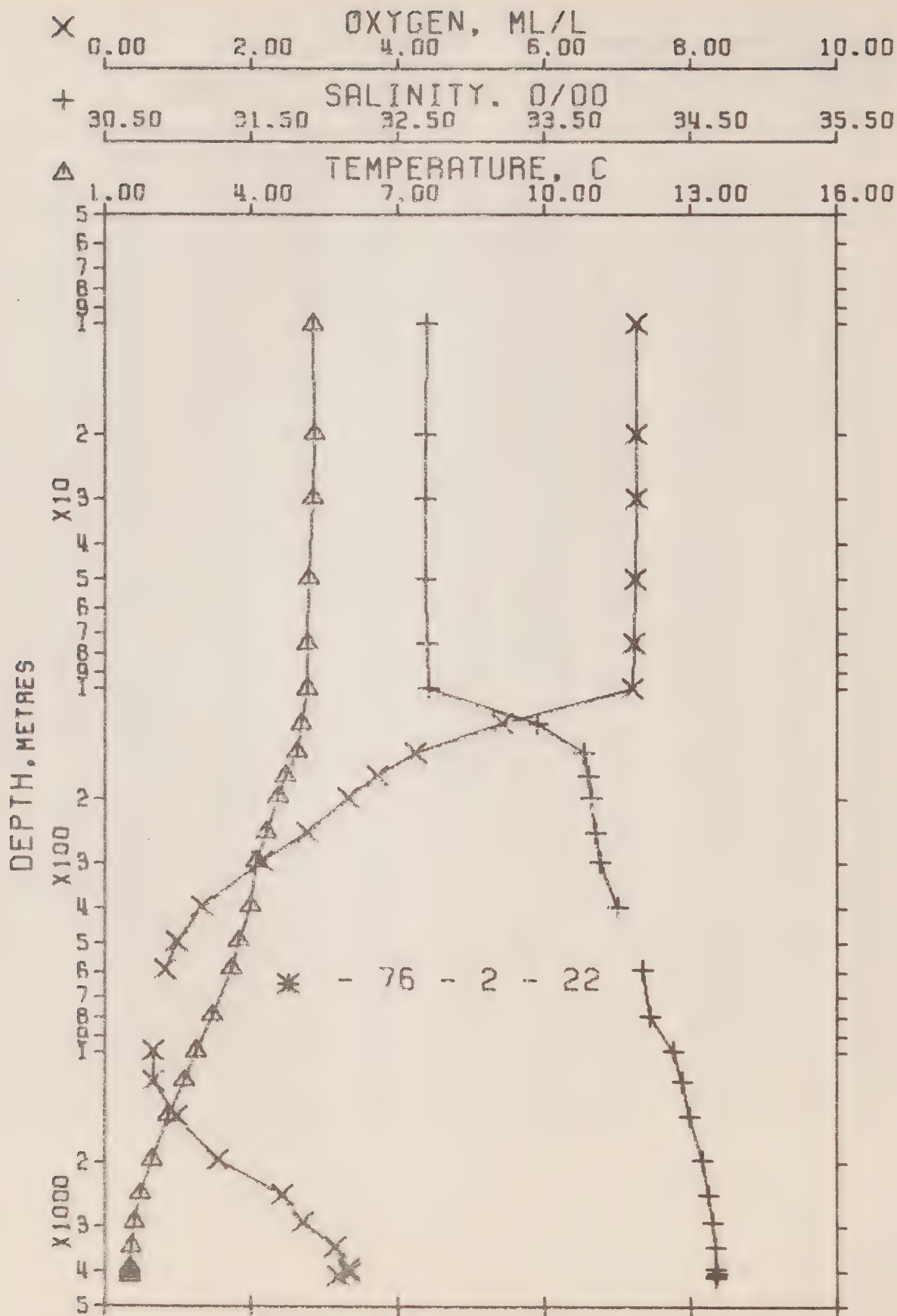
GMT 17.8

POSITION 50- 0.0 N, 145- 0.0 W

STATION P

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	5.23	32.678	0	25.836	217.5	5.23	217.2	0.0	0.0	7.20	1469.
10	5.20	32.678	10	25.839	217.2	5.20	216.9	0.22	0.01	7.11	1469.
19	5.21	32.679	19	25.839	217.3	5.21	216.9	0.42	0.04	7.26	1469.
20*	5.21	32.679	20	25.839	217.3	5.21	216.9	0.43	0.04	7.26	1469.
29	5.19	32.678	29	25.840	217.3	5.19	216.8	0.63	0.09	7.27	1469.
30*	5.19	32.678	30	25.840	217.3	5.19	216.8	0.65	0.10	7.27	1469.
48	5.19	32.678	48	25.840	217.5	5.19	216.7	1.05	0.26	7.29	1469.
50*	5.19	32.678	50	25.840	217.5	5.19	216.7	1.09	0.28	7.29	1470.
71	5.19	32.679	71	25.841	217.6	5.18	216.6	1.55	0.57	7.26	1470.
75*	5.18	32.678	75	25.841	217.6	5.18	216.6	1.63	0.62	7.27	1470.
95	5.16	32.675	94	25.841	217.8	5.15	216.6	2.06	1.00	7.28	1470.
100*	5.16	32.785	100	25.928	209.6	5.15	209.4	2.18	1.11	7.03	1470.
118	5.17	33.113	117	26.187	185.3	5.16	183.8	2.53	1.50	6.29	1471.
125*	5.14	33.310	125	26.346	170.3	5.13	168.7	2.66	1.66	5.78	1471.
140	5.09	33.685	139	26.648	141.8	5.08	140.0	2.89	1.97	4.81	1472.
150*	5.01	33.731	149	26.694	137.5	5.00	135.7	3.03	2.18	4.53	1472.
162	4.92	33.783	161	26.745	132.8	4.91	130.8	3.19	2.44	4.22	1472.
175*	4.80	33.799	174	26.771	130.4	4.79	128.2	3.36	2.73	3.92	1471.
184	4.72	33.810	183	26.789	128.8	4.71	126.6	3.48	2.95	3.72	1471.
200*	4.62	33.820	200	26.807	127.1	4.61	124.9	3.68	3.35	3.49	1471.
225*	4.48	33.834	224	26.833	124.9	4.47	122.4	4.00	4.03	3.15	1471.
228	4.47	33.835	226	26.836	124.6	4.45	122.1	4.03	4.10	3.12	1471.
250*	4.33	33.853	249	26.866	122.0	4.31	119.3	4.31	4.78	2.78	1471.
271	4.20	33.869	269	26.891	117.6	4.18	116.8	4.56	5.45	2.48	1471.
300*	4.13	33.906	300	26.927	116.4	4.11	113.4	4.90	6.44	2.17	1471.
359	4.02	33.971	356	26.991	110.8	3.99	107.4	5.57	8.69	1.63	1471.
400*	3.93	34.019	399	27.038	106.7	3.90	102.9	6.02	10.42	1.43	1472.
449	3.83	34.069	445	27.088	102.3	3.80	98.0	6.53	12.62	1.22	1472.
500*	3.72	34.114	498	27.135	98.2	3.68	93.6	7.04	15.10	1.00	1473.
544	3.63	34.148	539	27.171	95.0	3.59	90.2	7.46	17.34	0.84	1473.
600*	3.53	34.172	602	27.200	92.5	3.48	87.4	7.99	20.42	0.80	1474.
700*	3.36	34.210	700	27.246	88.7	3.32	82.9	8.90	26.42	0.74	1475.
752	3.29	34.228	745	27.267	87.0	3.24	81.0	9.35	29.78		1475.
800*	3.20	34.255	797	27.297	84.2	3.14	78.1	9.76	33.05		1476.
900*	3.02	34.305	895	27.354	79.3	2.96	72.6	10.58	40.13	0.50	1477.
944	2.95	34.326	935	27.377	77.3	2.89	70.5	10.92	43.36	0.63	1477.
1000*	2.87	34.351	994	27.404	74.9	2.80	67.9	11.35	47.58	0.63	1478.
1136	2.69	34.406	1125	27.464	69.7	2.61	62.2	12.33	58.30	0.63	1479.
1200*	2.62	34.427	1193	27.487	67.7	2.53	59.9	12.77	63.50	0.66	1480.
1423	2.38	34.492	1408	27.559	61.4	2.29	52.0	14.21	82.69	0.74	1483.
1500*	2.31	34.509	1493	27.577	59.7	2.21	51.2	14.67	89.60	0.86	1484.
1898	2.01	34.583	1875	27.651	52.5	1.89	43.1	16.88	127.75	1.40	1489.
2000*	1.95	34.588	1985	27.676	51.9	1.81	42.2	17.41	138.35	1.54	1491.
2371	1.76	34.603	2340	27.697	49.7	1.59	39.5	19.30	180.34	2.00	1496.
2500*	1.72	34.613	2475	27.708	49.0	1.54	38.4	19.93	196.15	2.10	1498.
2843	1.63	34.638	2803	27.735	47.0	1.42	35.7	21.58	240.97	2.34	1503.
3000*	1.60	34.648	2964	27.745	46.4	1.38	34.6	22.31	262.77	2.57	1506.
3316	1.54	34.668	3266	27.755	45.0	1.29	32.5	23.75	309.14	2.99	1511.
3500*	1.53	34.668	3453	27.766	45.4	1.26	32.3	24.58	337.93	3.02	1514.
3792	1.52	34.669	3730	27.767	45.9	1.27	32.0	25.31	387.29	3.08	1519.
3887	1.52	34.666	3823	27.765	46.4	1.21	32.2	26.35	404.54		1521.
3973	1.51	34.671	3907	27.770	45.1	1.19	31.6	26.75	420.69	3.13	1522.
3983	1.51	34.679	3917	27.776	45.5	1.19	31.0	26.80	422.60		1522.



## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 2- 22

DATE 8/ 3/76

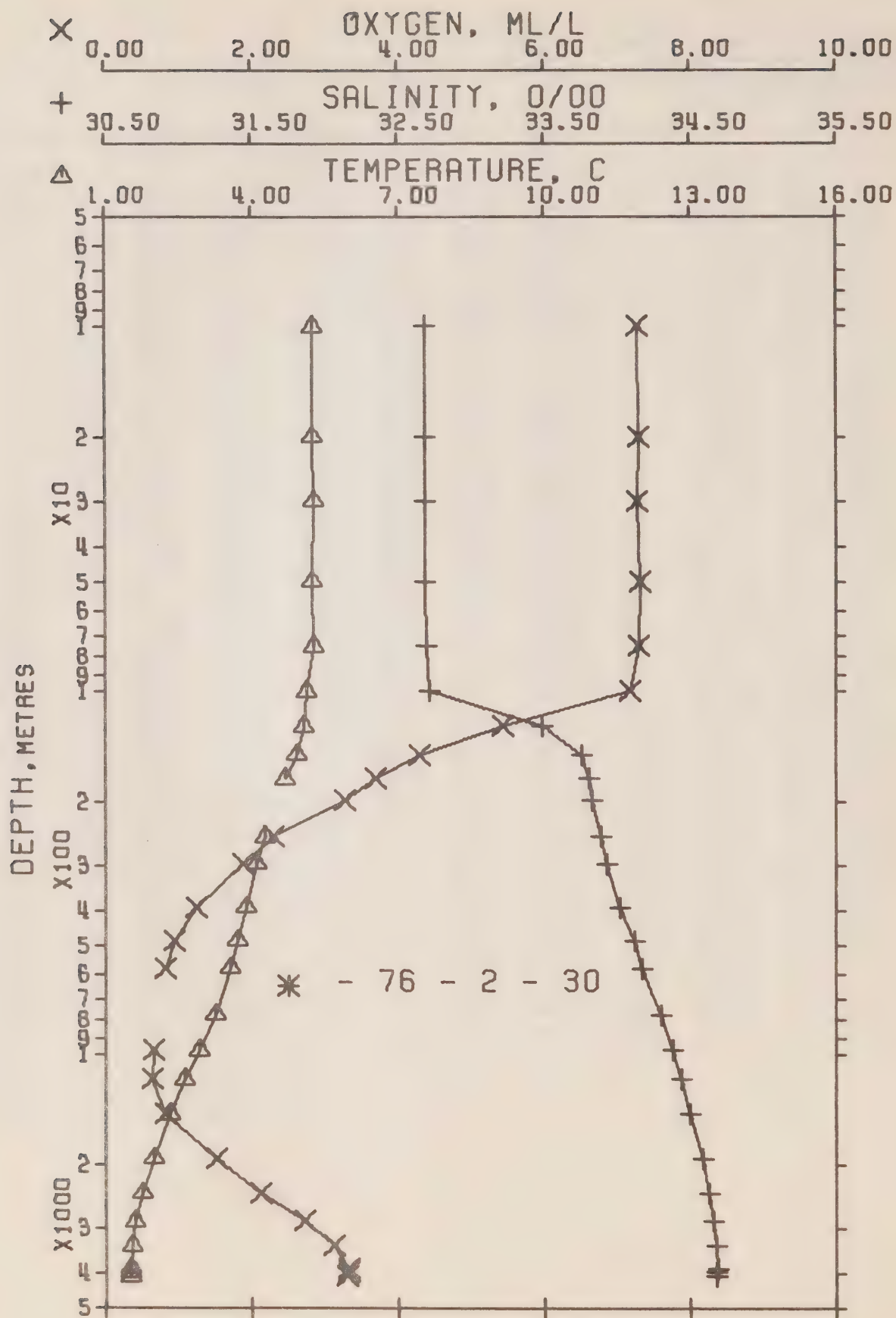
GMT 17.8

POSITION 50- 0.0 N, 145- 0.0 W

STATION P

## HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	QXY	SOUND
0	5.27	32.693	0	25.843	216.7	5.27	216.5	0.0	0.0	7.32	1469.
10	5.26	32.696	10	25.847	216.5	5.26	216.2	0.22	0.01	7.26	1469.
20	5.28	32.692	20	25.841	217.1	5.28	216.7	0.44	0.04	7.26	1469.
30	5.26	32.689	30	25.841	217.2	5.26	216.7	0.65	0.10	7.25	1469.
50	5.17	32.694	50	25.855	216.0	5.17	215.3	1.09	0.28	7.25	1469.
75	5.15	32.700	75	25.862	215.6	5.14	214.6	1.63	0.63	7.22	1470.
100*	5.13	32.713	99	25.875	214.7	5.12	213.4	2.16	1.10	7.20	1470.
101	5.13	32.713	100	25.875	214.7	5.12	213.4	2.18	1.11	7.20	1470.
125*	5.01	33.429	124	26.454	160.0	5.00	158.4	2.65	1.65	5.48	1471.
126	5.01	33.451	125	26.472	158.3	5.00	156.7	2.66	1.67	5.42	1471.
150	4.93	33.766	149	26.730	134.1	4.92	132.1	3.00	2.15	4.25	1472.
175	4.70	33.805	174	26.787	128.8	4.69	126.8	3.33	2.70	3.72	1471.
200	4.54	33.822	199	26.818	126.1	4.53	123.8	3.65	3.31	3.33	1471.
225*	4.42	33.837	225	26.843	123.9	4.40	121.5	3.96	3.98	3.03	1471.
250*	4.30	33.851	248	26.866	121.9	4.29	119.3	4.27	4.72	2.77	1471.
251	4.30	33.851	249	26.867	121.9	4.28	119.2	4.28	4.75	2.76	1471.
300	4.10	33.881	298	26.911	117.9	4.08	115.0	4.87	6.41	2.14	1471.
399	3.97	34.003	396	27.022	108.2	3.94	104.4	5.99	10.40	1.31	1472.
400*	3.97	34.004	397	27.022	108.1	3.94	104.3	6.00	10.44	1.31	1472.
498	3.73	34.095	494	27.119	99.6	3.69	95.2	7.01	15.07	0.99	1473.
500*	3.73	34.097	496	27.120	99.5	3.69	95.0	7.03	15.16	0.99	1473.
595	3.57	34.169	590	27.193	93.2	3.53	88.0	7.94	20.27	0.83	1474.
600*	3.56	34.170	596	27.195	93.0	3.52	87.8	7.99	20.55	0.83	1474.
700*	3.35	34.196	701	27.235	89.6	3.30	83.9	8.90	26.60	0.78	1474.
797	3.18	34.217	790	27.269	86.9	3.13	90.8	9.76	33.18		1475.
800*	3.18	34.219	793	27.271	86.7	3.12	80.5	9.79	33.37		1475.
900*	3.01	34.303	897	27.352	79.3	2.95	72.7	10.62	40.57		1476.
1000*	2.86	34.377	991	27.425	72.9	2.80	65.9	11.38	47.93		1478.
1003	2.86	34.379	993	27.427	72.7	2.79	65.7	11.40	48.14	0.66	1478.
1200*	2.62	34.434	1188	27.492	67.1	2.54	59.4	12.76	63.42	0.66	1480.
1206	2.61	34.436	1194	27.494	67.0	2.53	59.2	12.80	63.95	0.66	1480.
1500*	2.31	34.490	1484	27.563	61.1	2.21	52.6	14.68	89.89	0.97	1484.
1508	2.30	34.491	1491	27.564	60.9	2.20	52.4	14.73	90.59	0.98	1484.
2000*	1.95	34.576	1976	27.660	52.8	1.81	43.1	17.65	143.28	1.54	1491.
2001	1.95	34.576	1977	27.661	52.7	1.81	43.1	17.66	143.43	1.54	1491.
2490	1.73	34.624	2457	27.716	48.2	1.55	37.7	19.93	195.73	2.42	1498.
2500*	1.73	34.625	2467	27.717	48.2	1.55	37.6	19.97	196.93	2.42	1498.
2982	1.59	34.653	2939	27.750	45.8	1.37	34.2	22.25	260.55	2.70	1506.
3000*	1.59	34.654	2958	27.750	45.8	1.37	34.1	22.34	263.05	2.72	1506.
3484	1.53	34.675	3430	27.772	44.8	1.26	31.8	24.51	334.56	3.14	1514.
3500*	1.53	34.675	3446	27.771	44.9	1.26	31.8	24.58	337.46	3.15	1514.
4000*	1.51	34.668	3933	27.767	46.4	1.19	31.8	26.85	424.16	3.32	1523.
4001	1.51	34.668	3934	27.767	46.4	1.19	31.8	26.86	424.33	3.32	1523.
4100*	1.51	34.676	4031	27.774	46.0	1.18	31.2	27.31	443.24	3.35	1524.
4107	1.51	34.677	4037	27.775	46.1	1.17	31.1	27.34	444.51	3.35	1525.
4200*	1.52	34.670	4128	27.768	46.9	1.17	31.6	27.78	462.89	3.20	1526.
4203	1.52	34.670	4131	27.768	46.9	1.17	31.6	27.79	463.52	3.19	1526.
4214	1.52	34.670	4142	27.768	46.9	1.17	31.6	27.85	465.79		1526.





## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 2- 30

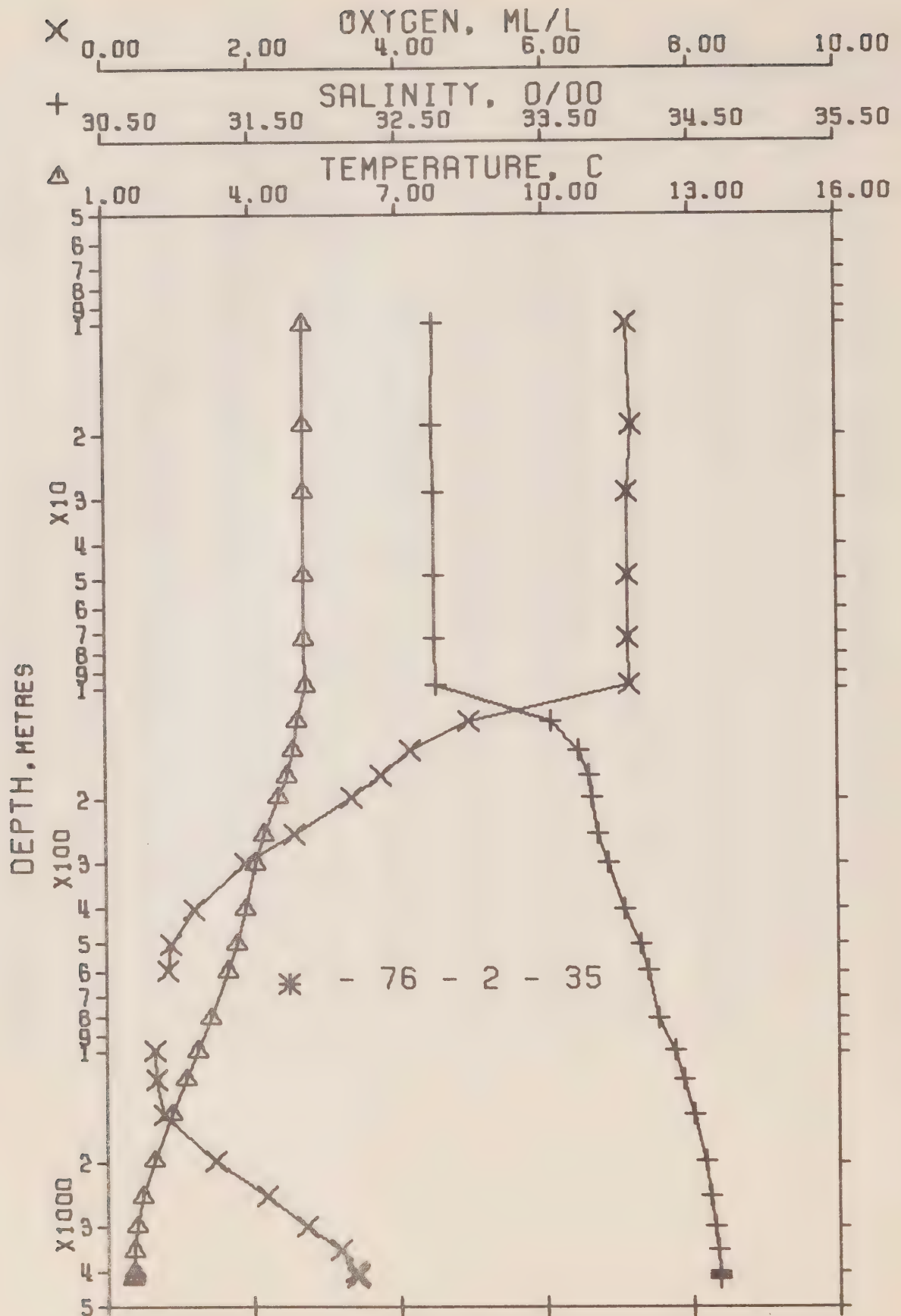
DATE 15/ 3/76 GMT 17.7

POSITION 50- 0.0 N. 145- 0.0 W

STATION P

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	5.27	32.690	0	25.841	216.9	5.27	216.7	0.0	0.0	7.24	1469.
10	5.27	32.693	10	25.843	216.8	5.27	216.5	0.22	0.01	7.28	1469.
20	5.27	32.691	20	25.842	217.1	5.27	216.6	0.44	0.04	7.30	1469.
30	5.28	32.690	30	25.840	217.4	5.28	216.9	0.66	0.10	7.28	1470.
50	5.27	32.693	50	25.843	217.2	5.27	216.5	1.09	0.28	7.31	1470.
75	5.28	32.705	75	25.852	216.7	5.27	215.7	1.64	0.63	7.30	1470.
100*	5.15	32.722	99	25.879	214.2	5.15	213.0	2.17	1.10	7.17	1470.
101	5.15	32.722	100	25.880	214.2	5.14	213.0	2.18	1.12	7.17	1470.
125*	5.08	33.463	124	26.473	158.2	5.07	156.6	2.65	1.65	5.50	1471.
126	5.08	33.486	125	26.492	156.5	5.07	154.8	2.66	1.67	5.45	1471.
150	4.93	33.763	149	26.728	134.3	4.92	132.4	3.00	2.15	4.29	1472.
175	4.68	33.812	174	26.795	118.2	4.67	126.1	3.33	2.69	3.70	1471.
200	4.53	33.830	199	26.825	125.4	4.52	123.1	3.65	3.30	3.27	1471.
225*	4.40	33.861	225	26.865	121.9	4.38	119.4	3.95	3.96	2.78	1471.
250*	4.27	33.890	248	26.900	118.7	4.26	116.0	4.25	4.69	2.34	1471.
253	4.26	33.893	251	26.904	118.2	4.24	115.6	4.29	4.78	2.29	1471.
300	4.08	33.931	298	26.953	114.0	4.06	111.0	4.84	6.33	1.89	1471.
395	3.88	34.025	392	27.048	105.7	3.85	101.9	5.88	10.02	1.23	1471.
400*	3.87	34.030	397	27.053	105.2	3.84	101.4	5.93	10.23	1.21	1472.
489	3.71	34.117	485	27.138	97.7	3.68	93.3	6.83	14.31	0.93	1472.
500*	3.69	34.124	497	27.146	97.1	3.65	92.5	6.94	14.84	0.92	1473.
584	3.55	34.173	579	27.199	92.6	3.51	87.6	7.73	19.25	0.83	1473.
600*	3.52	34.185	597	27.211	91.5	3.48	86.4	7.88	20.14	0.82	1474.
700*	3.36	34.252	701	27.280	85.5	3.31	79.7	8.77	25.99	0.77	1475.
782	3.24	34.301	775	27.330	81.2	3.19	75.0	9.45	31.16		1475.
800*	3.21	34.309	795	27.339	80.4	3.15	74.1	9.59	32.32		1476.
900*	3.04	34.351	897	27.388	76.1	2.98	69.4	10.38	39.09		1477.
981	2.92	34.382	972	27.424	73.0	2.85	66.0	10.98	44.91	0.66	1478.
1000*	2.89	34.387	992	27.431	72.4	2.82	65.3	11.12	46.27	0.66	1478.
1179	2.63	34.436	1167	27.493	67.0	2.55	59.4	12.36	60.09	0.64	1480.
1200*	2.61	34.441	1190	27.499	66.5	2.53	58.8	12.50	61.79	0.66	1480.
1472	2.33	34.502	1456	27.571	60.3	2.23	51.9	14.22	85.19	0.83	1483.
1500*	2.31	34.508	1487	27.577	59.8	2.21	51.2	14.39	87.73	0.87	1484.
1956	1.98	34.588	1932	27.668	52.0	1.85	42.5	16.92	132.27	1.51	1490.
2000*	1.96	34.592	1980	27.673	51.6	1.82	41.9	17.15	136.90	1.57	1491.
2439	1.75	34.630	2407	27.719	47.9	1.58	37.3	19.32	186.12	2.11	1497.
2500*	1.73	34.633	2471	27.724	47.5	1.55	36.9	19.61	193.41	2.19	1498.
2929	1.59	34.656	2887	27.752	45.5	1.38	34.0	21.60	248.42	2.72	1505.
3000*	1.58	34.659	2961	27.755	45.3	1.36	33.6	21.92	258.15	2.79	1506.
3431	1.53	34.677	3378	27.773	44.5	1.27	31.7	23.85	321.31	3.12	1513.
3500*	1.53	34.679	3449	27.775	44.6	1.26	31.5	24.16	332.15	3.15	1514.
3951	1.52	34.691	3885	27.785	44.8	1.20	30.2	26.16	408.22	3.32	1522.
4000*	1.52	34.698	3933	27.783	45.1	1.20	30.4	26.38	417.21	3.32	1523.
4057	1.52	34.685	3989	27.780	45.5	1.19	30.6	26.64	427.89	3.31	1524.
4100*	1.52	34.685	4031	27.780	45.6	1.18	30.6	26.84	435.96	3.30	1524.
4155	1.51	34.684	4084	27.780	45.7	1.17	30.6	27.09	446.48	3.29	1525.
4165	1.52	34.684	4094	27.779	45.9	1.18	30.6	27.14	448.47		1526.



## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 2- 35

DATE 23/ 3/76 GMT 18.1

POSITION 50- 0.0 N, 145- 0.0 W

STATION P

## HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	5.06	32.748	0	25.910	210.4	5.06	210.2	0.0	0.0	7.08	1468.
10	5.07	32.748	10	25.909	210.6	5.07	210.3	0.21	0.01	7.15	1468.
19	5.09	32.743	19	25.903	211.2	5.09	210.8	0.40	0.04	7.20	1469.
20*	5.09	32.744	20	25.904	211.2	5.09	210.7	0.42	0.04	7.19	1469.
29	5.08	32.748	29	25.908	210.9	5.08	210.4	0.62	0.09	7.13	1469.
30*	5.08	32.748	30	25.908	210.9	5.08	210.4	0.63	0.10	7.13	1469.
49	5.08	32.749	49	25.909	210.9	5.08	210.3	1.04	0.26	7.14	1469.
50*	5.08	32.749	50	25.909	211.0	5.08	210.3	1.05	0.27	7.14	1469.
73	5.08	32.750	73	25.910	211.1	5.07	210.2	1.55	0.58	7.15	1470.
75*	5.08	32.751	75	25.910	211.1	5.08	210.1	1.58	0.60	7.15	1470.
99	5.10	32.764	98	25.919	210.5	5.09	209.3	2.10	1.06	7.16	1470.
100*	5.09	32.810	99	25.956	207.0	5.08	205.7	2.13	1.09	7.03	1470.
124	4.94	33.539	123	26.550	150.9	4.93	149.3	2.54	1.56	4.96	1471.
125*	4.93	33.549	124	26.558	150.2	4.93	148.5	2.56	1.58	4.92	1471.
149	4.84	33.733	148	26.714	135.6	4.83	133.7	2.90	2.06	4.15	1471.
150*	4.83	33.736	149	26.717	135.3	4.82	133.4	2.91	2.08	4.14	1471.
175	4.71	33.801	174	26.783	129.3	4.70	127.2	3.24	2.63	3.76	1471.
200	4.54	33.823	199	26.819	126.0	4.53	123.7	3.56	3.25	3.36	1471.
225*	4.39	33.843	225	26.851	123.1	4.37	120.7	3.87	3.91	2.97	1471.
250*	4.25	33.862	248	26.881	120.5	4.23	117.8	4.18	4.65	2.61	1470.
253	4.23	33.864	251	26.884	120.1	4.21	117.5	4.21	4.74	2.57	1470.
300*	4.06	33.927	298	26.951	114.1	4.04	111.2	4.76	6.29	1.96	1471.
304	4.05	33.932	302	26.957	113.6	4.03	110.6	4.81	6.44	1.91	1471.
400*	3.87	34.035	398	27.057	104.8	3.84	101.0	5.85	10.18	1.24	1472.
407	3.86	34.042	404	27.064	104.2	3.83	100.4	5.93	10.49	1.20	1472.
500*	3.67	34.141	497	27.161	95.6	3.64	91.1	6.95	14.78	0.91	1472.
507	3.66	34.148	503	27.168	95.0	3.62	90.5	6.92	15.13	0.88	1473.
600*	3.48	34.195	595	27.222	90.4	3.44	85.3	7.78	19.96	0.85	1473.
602	3.48	34.196	597	27.224	90.3	3.44	85.1	7.80	20.08	0.84	1473.
700*	3.30	34.233	701	27.271	86.2	3.25	80.6	8.66	25.81	0.79	1474.
900*	3.14	34.266	794	27.312	82.8	3.08	76.6	9.51	32.27	0.74	1475.
811	3.12	34.270	804	27.316	82.4	3.06	76.3	9.60	33.05		1475.
900*	2.99	34.324	896	27.371	77.6	2.93	71.0	10.31	39.24		1476.
1000*	2.86	34.379	991	27.426	72.8	2.80	65.8	11.06	46.53		1478.
1003	2.86	34.380	993	27.428	72.6	2.79	65.6	11.08	46.74	0.65	1478.
1198	2.61	34.436	1186	27.494	66.9	2.53	59.2	12.44	62.01	0.68	1480.
1200*	2.61	34.436	1188	27.495	66.8	2.53	59.2	12.46	62.15	0.69	1480.
1497	2.32	34.508	1481	27.576	59.9	2.22	51.3	14.32	87.84	0.79	1484.
1500*	2.32	34.508	1484	27.577	59.8	2.22	51.2	14.33	88.08	0.79	1484.
2000*	1.96	34.585	1976	27.667	52.2	1.83	42.6	17.07	137.00	1.48	1491.
2007	1.96	34.586	1982	27.668	52.1	1.82	42.5	17.11	137.70	1.49	1491.
2500*	1.73	34.621	2469	27.714	48.4	1.55	37.9	19.57	194.35	2.16	1498.
2524	1.72	34.623	2490	27.716	48.2	1.54	37.6	19.69	197.31	2.19	1498.
3000*	1.60	34.653	2960	27.748	46.0	1.38	34.3	21.92	260.35	2.69	1506.
3043	1.59	34.655	2999	27.751	45.8	1.36	34.0	22.12	266.50	2.73	1507.
3500*	1.55	34.667	3449	27.764	45.7	1.27	32.5	24.20	335.73	3.14	1514.
3558	1.54	34.668	3502	27.765	45.7	1.26	32.4	24.47	345.27	3.19	1515.
4000*	1.53	34.677	3936	27.773	46.1	1.21	31.3	26.49	423.33	3.36	1523.
4060	1.53	34.678	3992	27.774	46.1	1.20	31.2	26.77	434.73	3.38	1524.
4100*	1.53	34.680	4031	27.776	46.1	1.19	31.0	26.95	442.37	3.40	1525.
4159	1.53	34.683	4088	27.778	46.0	1.19	30.7	27.22	453.81	3.42	1526.
4200*	1.53	34.683	4128	27.779	46.0	1.19	30.6	27.41	461.96	3.41	1526.
4247	1.52	34.684	4174	27.779	46.1	1.17	30.6	27.63	471.23	3.41	1527.
4257	1.52	34.684	4183	27.779	46.1	1.17	30.5	27.67	473.08		1527.





Results of STP Observations  
(P-76-2)

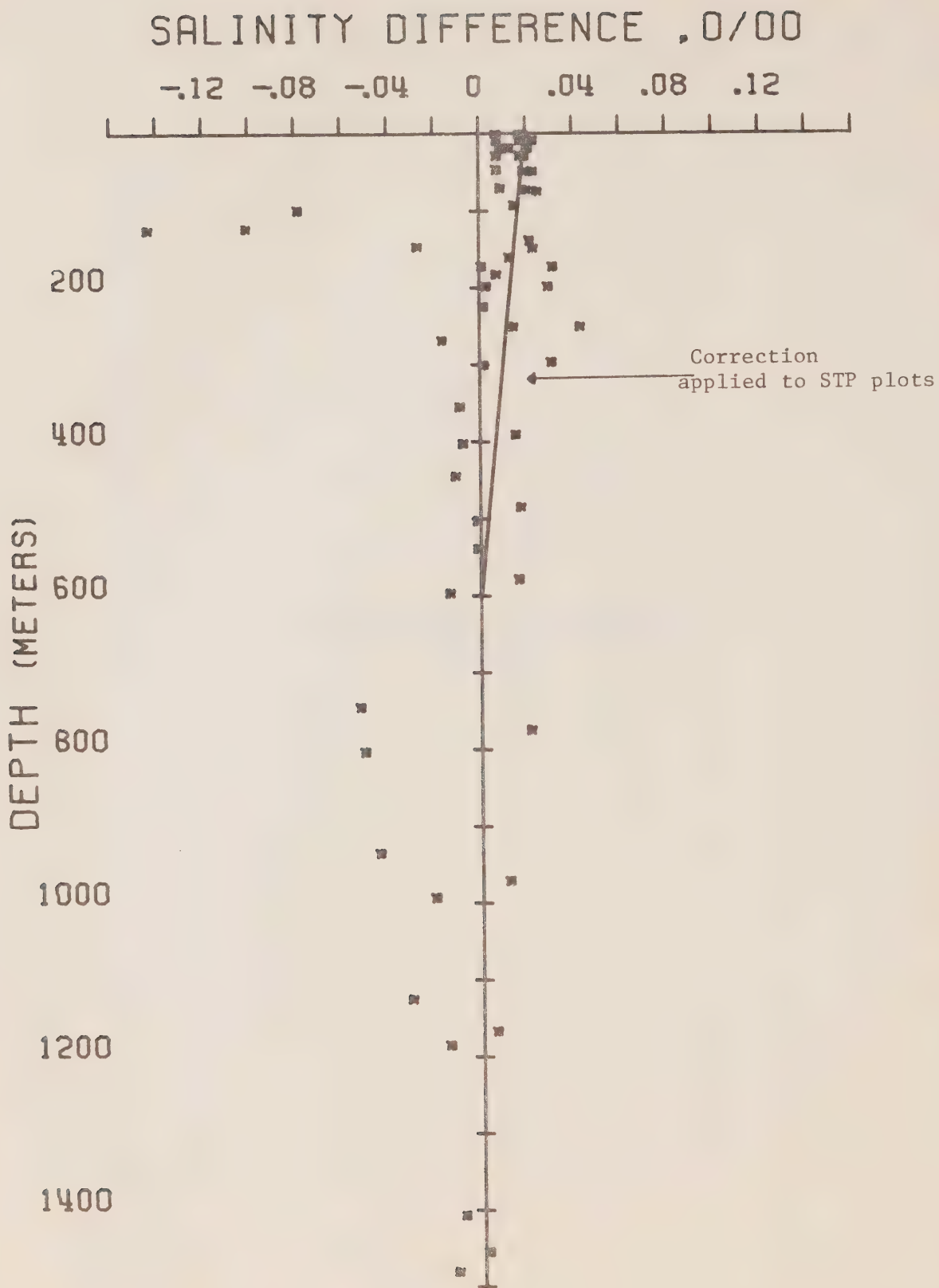


Fig. 5 Salinity difference between hydro data and STP. P-76-2

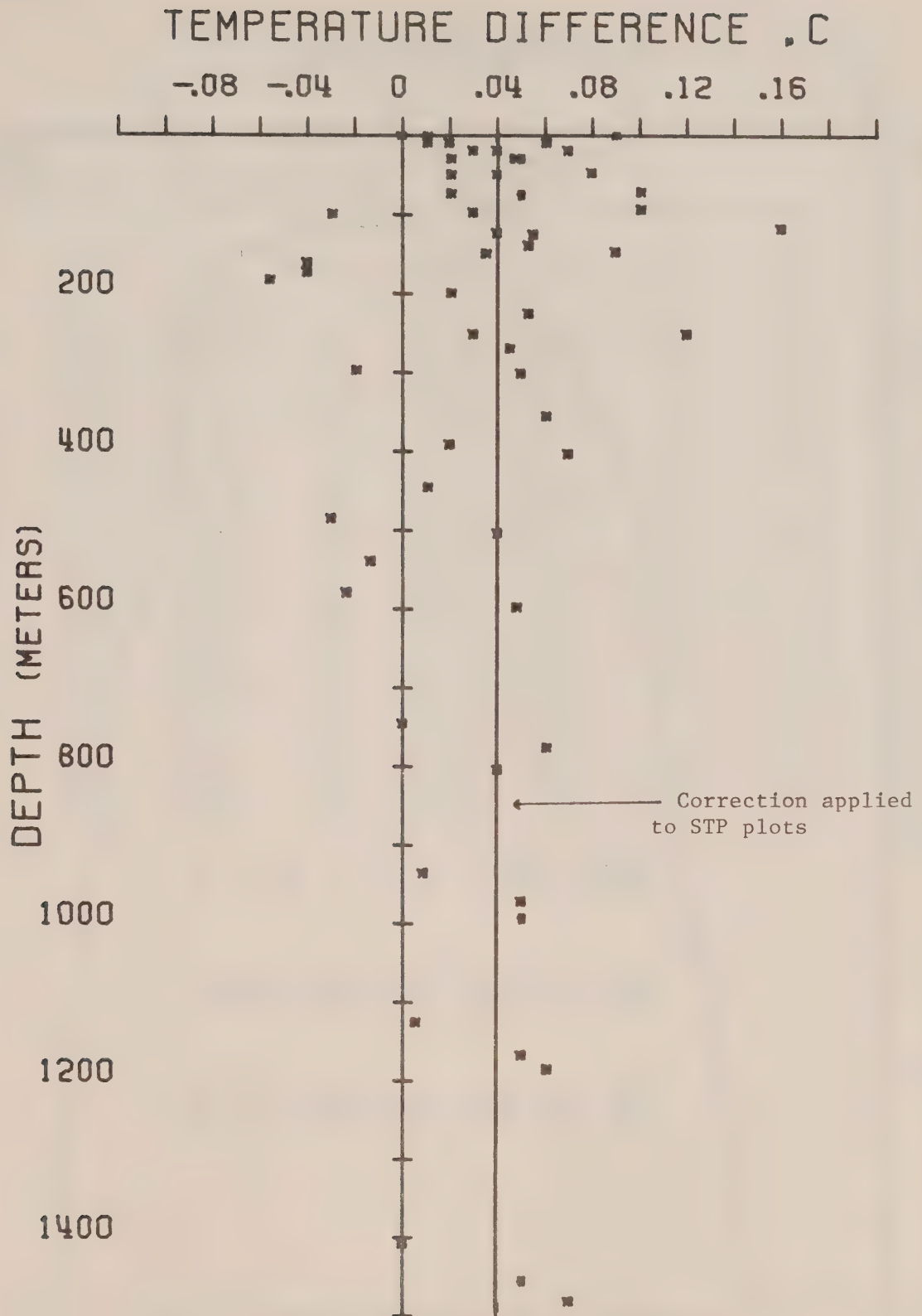
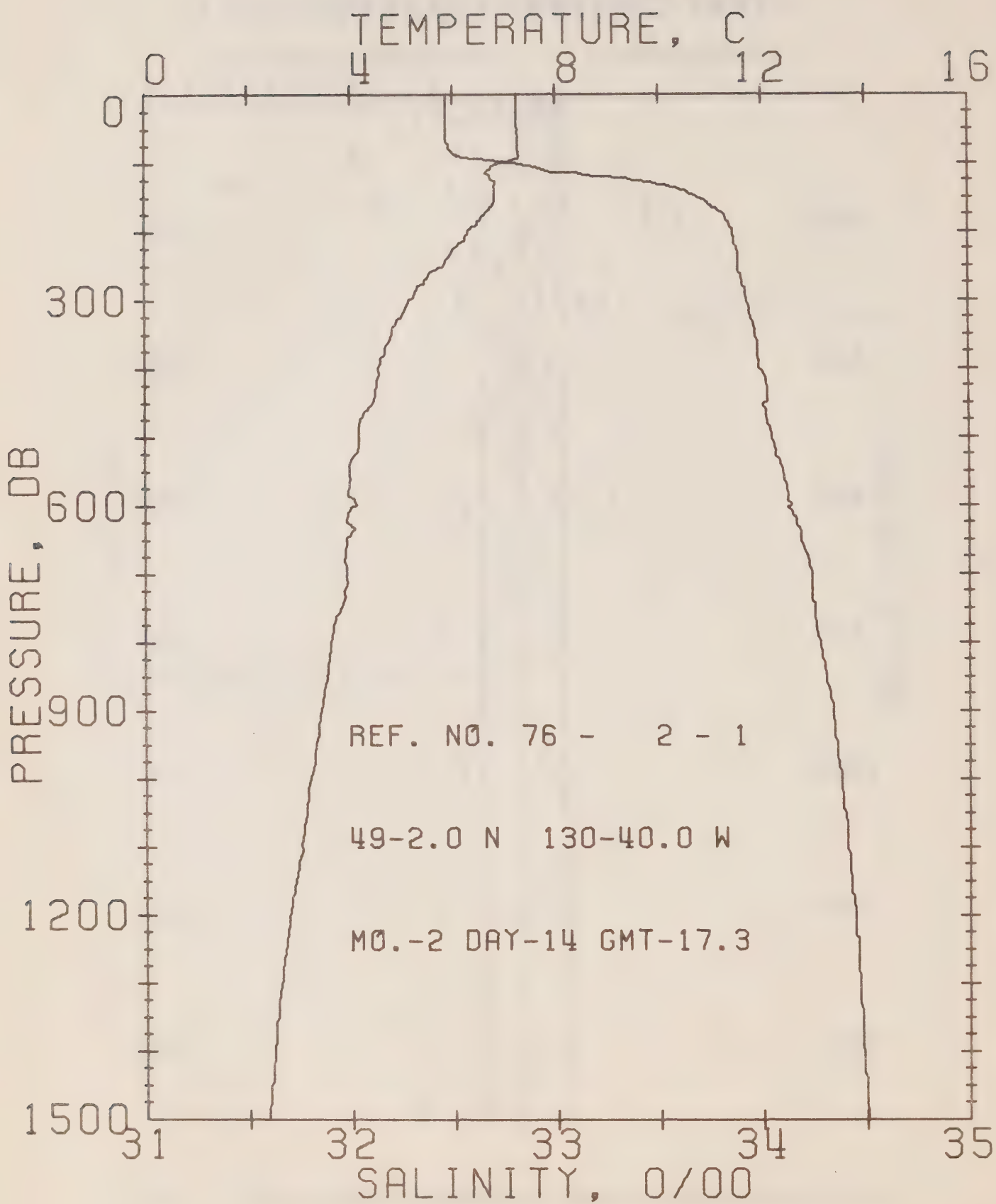


Fig. 6 Temperature difference between hydro data and STP. P-76-2





## OFFSHORE OCEANOGRAPHY GROUP

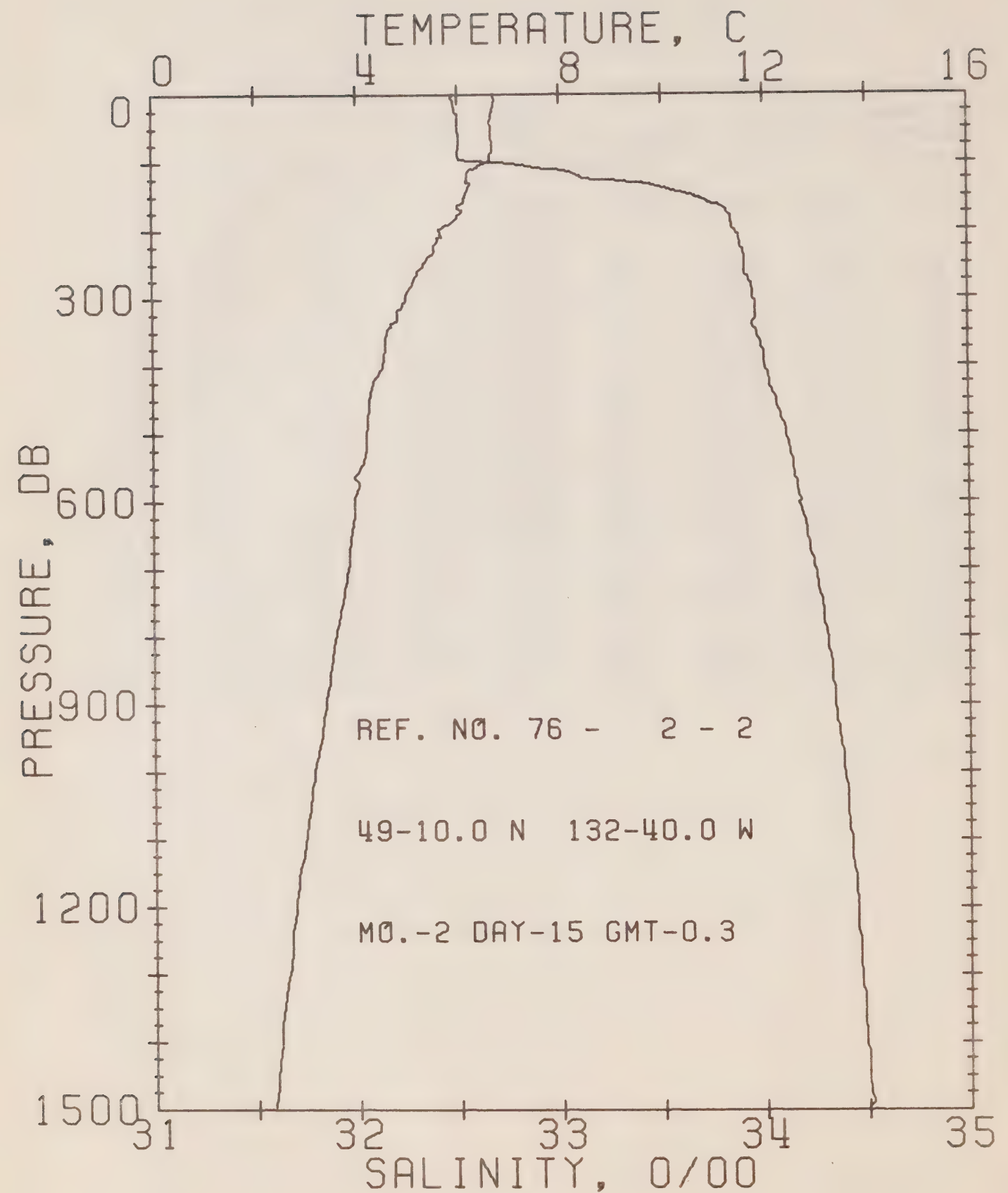
REFERENCE NO. 76- 2- 1

DATE 14/ 2/76

POSITION 49- 2.0N, 130-40.0W GMT 17.3

RESULTS OF STP CAST 479 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.26	32.47	0	25.42	257.0	0.0	0.0	1477.
10	7.24	32.47	10	25.42	257.1	0.26	0.01	1477.
20	7.25	32.47	20	25.42	257.4	0.51	0.05	1477.
30	7.25	32.47	30	25.42	257.5	0.77	0.12	1477.
50	7.26	32.47	50	25.42	257.9	1.29	0.33	1478.
75	7.27	32.48	75	25.42	257.6	1.93	0.74	1478.
100	6.95	32.77	99	25.70	232.1	2.56	1.30	1478.
125	6.80	33.38	124	26.19	185.0	3.09	1.90	1478.
150	6.82	33.69	149	26.44	162.5	3.52	2.50	1479.
175	6.61	33.82	174	26.57	150.5	3.91	3.15	1479.
200	6.29	33.86	199	26.64	143.8	4.28	3.85	1478.
225	6.01	33.88	223	26.69	139.1	4.63	4.62	1477.
250	5.80	33.89	248	26.73	136.1	4.98	5.45	1477.
300	5.15	33.93	298	26.83	125.9	5.63	7.28	1475.
400	4.54	33.99	397	26.95	115.4	6.83	11.55	1474.
500	4.15	34.05	496	27.04	107.6	7.94	16.65	1474.
600	4.09	34.14	595	27.12	101.0	8.97	22.44	1476.
800	3.61	34.28	793	27.28	87.0	10.84	35.71	1477.
1000	3.19	34.38	990	27.40	76.2	12.47	50.52	1479.
1200	2.78	34.45	1188	27.49	67.7	13.92	66.81	1481.



## OFFSHORE OCEANOGRAPHY GROUP

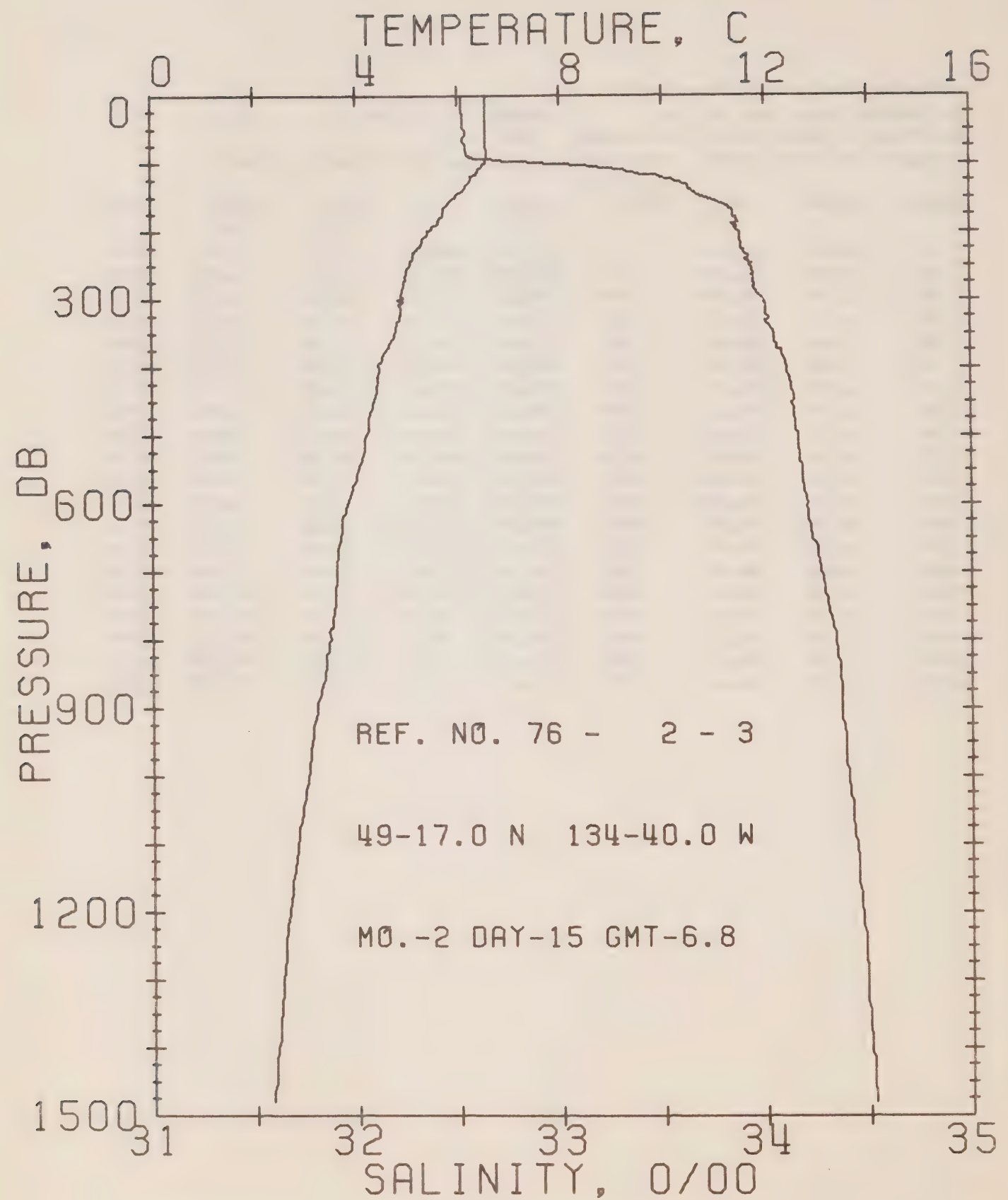
REFERENCE NO. 76- 2- 2

DATE 15/ 2/76

POSITION 49-10.0N, 132-40.0W GMT 0.3

RESULTS OF STP CAST 428 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.72	32.48	0	25.50	249.3	0.0	0.0	1475.
10	6.73	32.48	10	25.50	249.8	0.25	0.01	1475.
20	6.70	32.48	20	25.50	249.3	0.50	0.05	1475.
30	6.67	32.50	30	25.52	247.8	0.75	0.11	1475.
50	6.66	32.50	50	25.52	247.9	1.24	0.32	1475.
75	6.68	32.51	75	25.53	247.9	1.86	0.71	1476.
100	6.60	32.67	99	25.66	235.1	2.48	1.26	1476.
125	6.19	33.18	124	26.12	192.3	3.01	1.86	1475.
150	6.13	33.65	149	26.50	156.4	3.43	2.46	1476.
175	6.03	33.82	174	26.65	142.8	3.80	3.07	1476.
200	5.64	33.85	199	26.72	136.1	4.15	3.74	1475.
225	5.51	33.89	223	26.76	132.3	4.49	4.46	1475.
250	5.31	33.91	248	26.80	128.8	4.81	5.25	1475.
300	4.95	33.95	298	26.87	122.1	5.44	7.01	1474.
400	4.50	34.00	397	26.96	114.2	6.61	11.20	1474.
500	4.20	34.11	496	27.08	103.6	7.70	16.15	1475.
600	3.94	34.18	595	27.17	96.4	8.70	21.76	1475.
800	3.56	34.31	793	27.30	84.4	10.52	34.69	1477.
1000	3.12	34.38	990	27.41	75.1	12.11	49.32	1479.
1200	2.74	34.45	1188	27.49	67.3	13.54	65.27	1480.





## OFFSHORE OCEANOGRAPHY GROUP

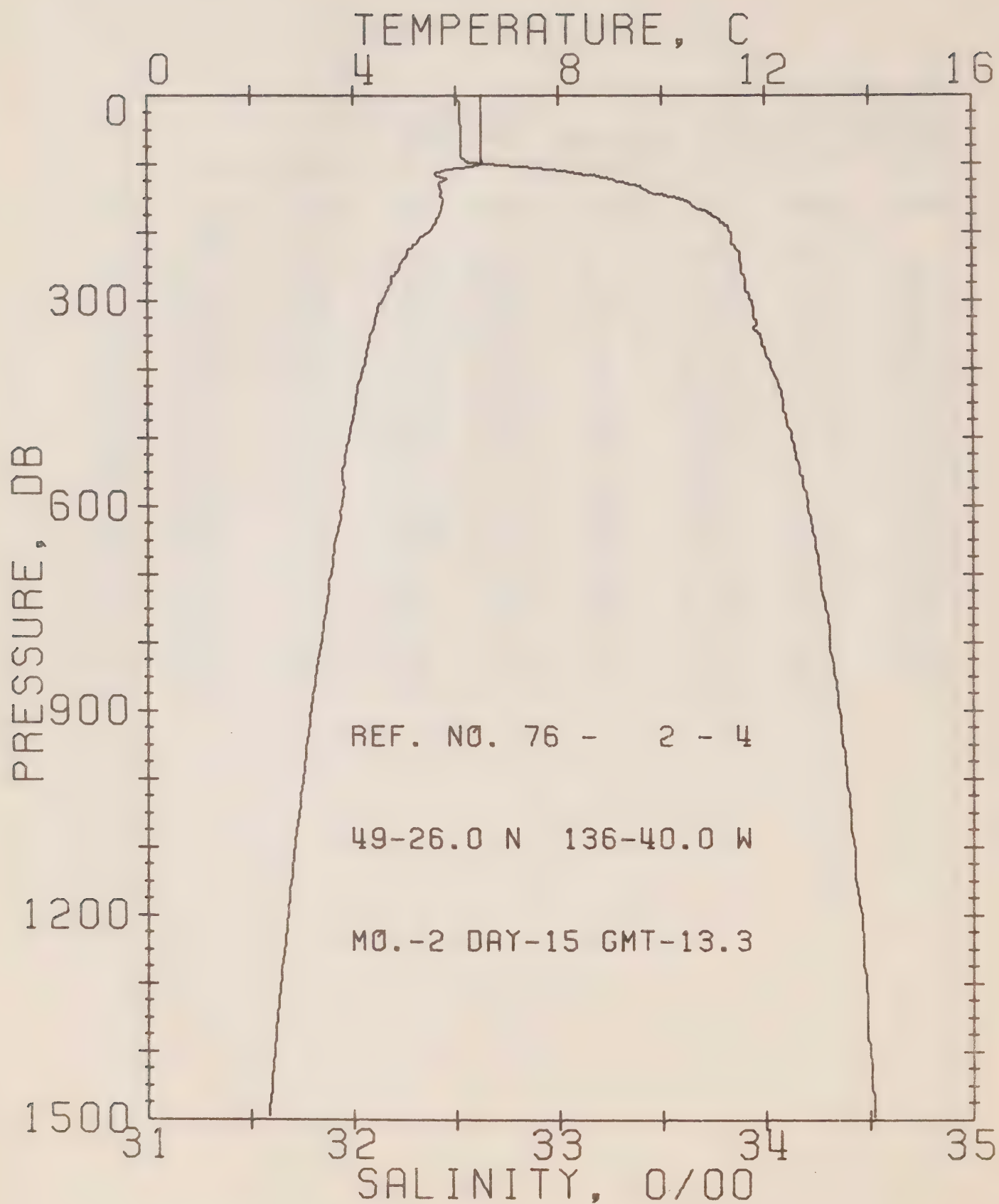
REFERENCE NO. 76- 2- 3

DATE 15/ 2/76

POSITION 49-17.0N, 134-40.0W GMT 6.8

RESULTS OF STP CAST 469 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.56	32.52	0	25.55	244.4	0.0	0.0	1474.
10	6.57	32.52	10	25.55	244.9	0.24	0.01	1474.
20	6.57	32.52	20	25.55	244.9	0.49	0.05	1474.
30	6.56	32.53	30	25.56	244.2	0.73	0.11	1475.
50	6.56	32.53	50	25.56	244.1	1.22	0.31	1475.
75	6.57	32.54	75	25.56	244.1	1.83	0.70	1475.
100	6.53	32.99	99	25.92	210.4	2.43	1.23	1476.
125	6.23	33.57	124	26.42	163.7	2.89	1.75	1476.
150	5.94	33.71	149	26.57	150.0	3.28	2.30	1476.
175	5.70	33.85	174	26.71	136.9	3.63	2.99	1475.
200	5.41	33.87	199	26.76	131.9	3.97	3.53	1474.
225	5.19	33.89	223	26.80	128.5	4.29	4.23	1474.
250	5.05	33.93	248	26.85	124.2	4.61	5.00	1474.
300	4.85	34.02	298	26.94	115.7	5.22	6.70	1474.
400	4.45	34.11	397	27.06	105.5	6.34	10.71	1474.
500	4.18	34.16	496	27.12	99.7	7.37	15.42	1475.
600	3.81	34.21	595	27.20	92.8	8.34	20.85	1475.
800	3.47	34.34	793	27.34	81.0	10.08	33.21	1477.
1000	3.02	34.40	990	27.43	72.9	11.61	47.21	1478.
1200	2.63	34.47	1188	27.52	64.8	12.98	62.57	1480.



## OFFSHORE OCEANOGRAPHY GROUP

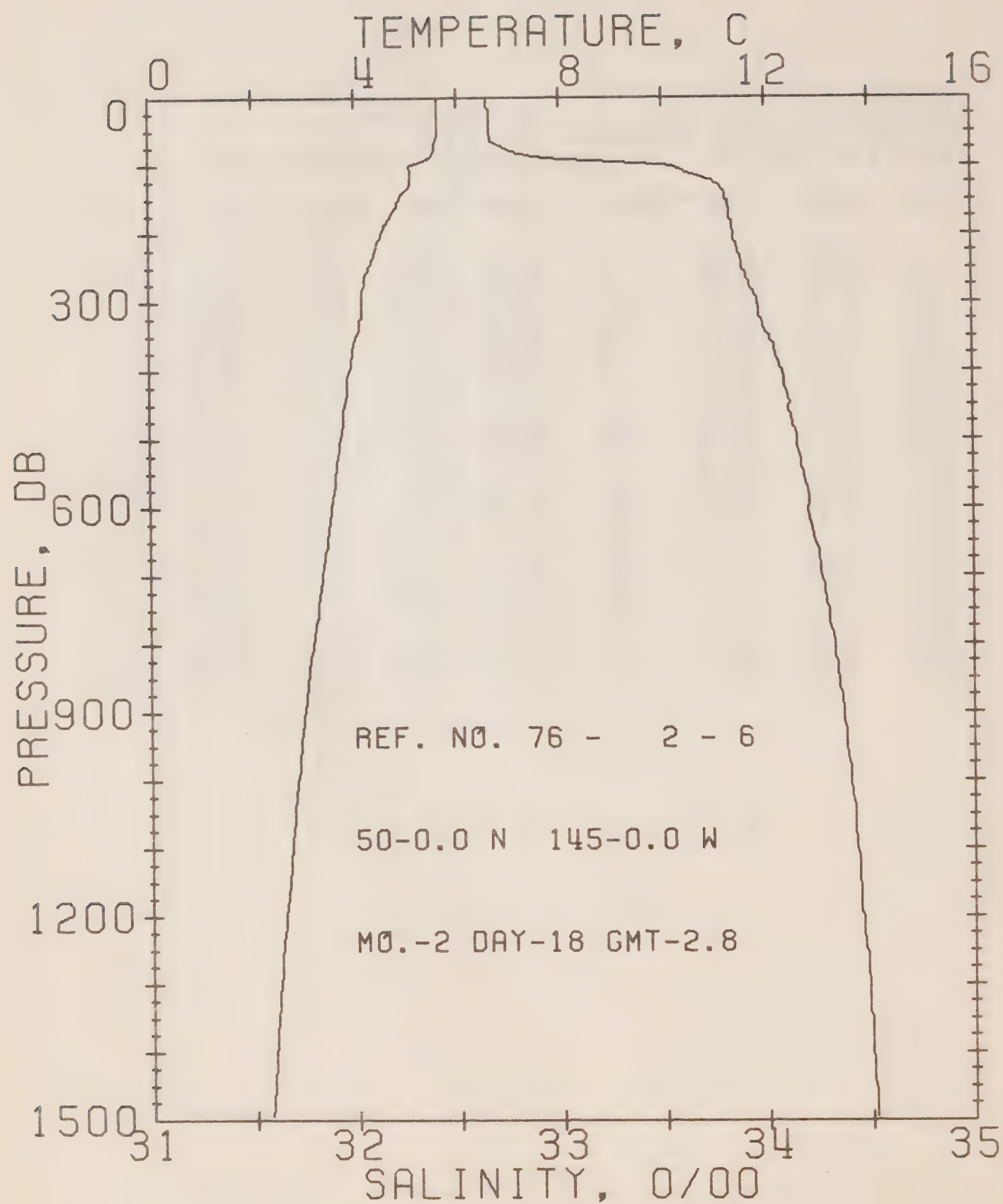
REFERENCE NO. 76- 2- 4

DATE 15/ 2/76

POSITION 49-26.0N, 136-40.0W GMT 13.3

RESULTS OF STP CAST 395 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.50	32.51	0	25.55	244.4	0.0	0.0	1474.
10	6.50	32.52	10	25.56	244.0	0.24	0.01	1474.
20	6.50	32.52	20	25.56	244.1	0.49	0.05	1474.
30	6.50	32.52	30	25.56	244.2	0.73	0.11	1474.
50	6.50	32.53	50	25.57	243.7	1.22	0.31	1475.
75	6.51	32.53	75	25.56	244.2	1.83	0.70	1475.
100	6.51	32.63	99	25.64	237.0	2.44	1.24	1476.
125	5.76	33.29	124	26.26	178.9	2.94	1.81	1474.
150	5.75	33.58	149	26.49	157.4	3.36	2.40	1475.
175	5.67	33.75	174	26.63	144.0	3.74	3.03	1475.
200	5.47	33.83	199	26.72	135.7	4.09	3.69	1475.
225	5.10	33.86	223	26.79	129.4	4.42	4.41	1474.
250	4.91	33.89	248	26.83	125.7	4.74	5.18	1473.
300	4.57	33.94	298	26.91	118.5	5.35	6.89	1473.
400	4.20	34.03	397	27.02	108.5	6.49	10.95	1473.
500	3.92	34.13	496	27.13	99.0	7.52	15.67	1473.
600	3.78	34.21	595	27.21	92.4	8.47	21.03	1475.
800	3.38	34.31	793	27.32	82.1	10.21	33.40	1476.
1000	3.01	34.39	990	27.42	73.6	11.76	47.58	1478.
1200	2.72	34.46	1138	27.50	66.3	13.16	63.26	1480.





## OFFSHORE OCEANOGRAPHY GROUP

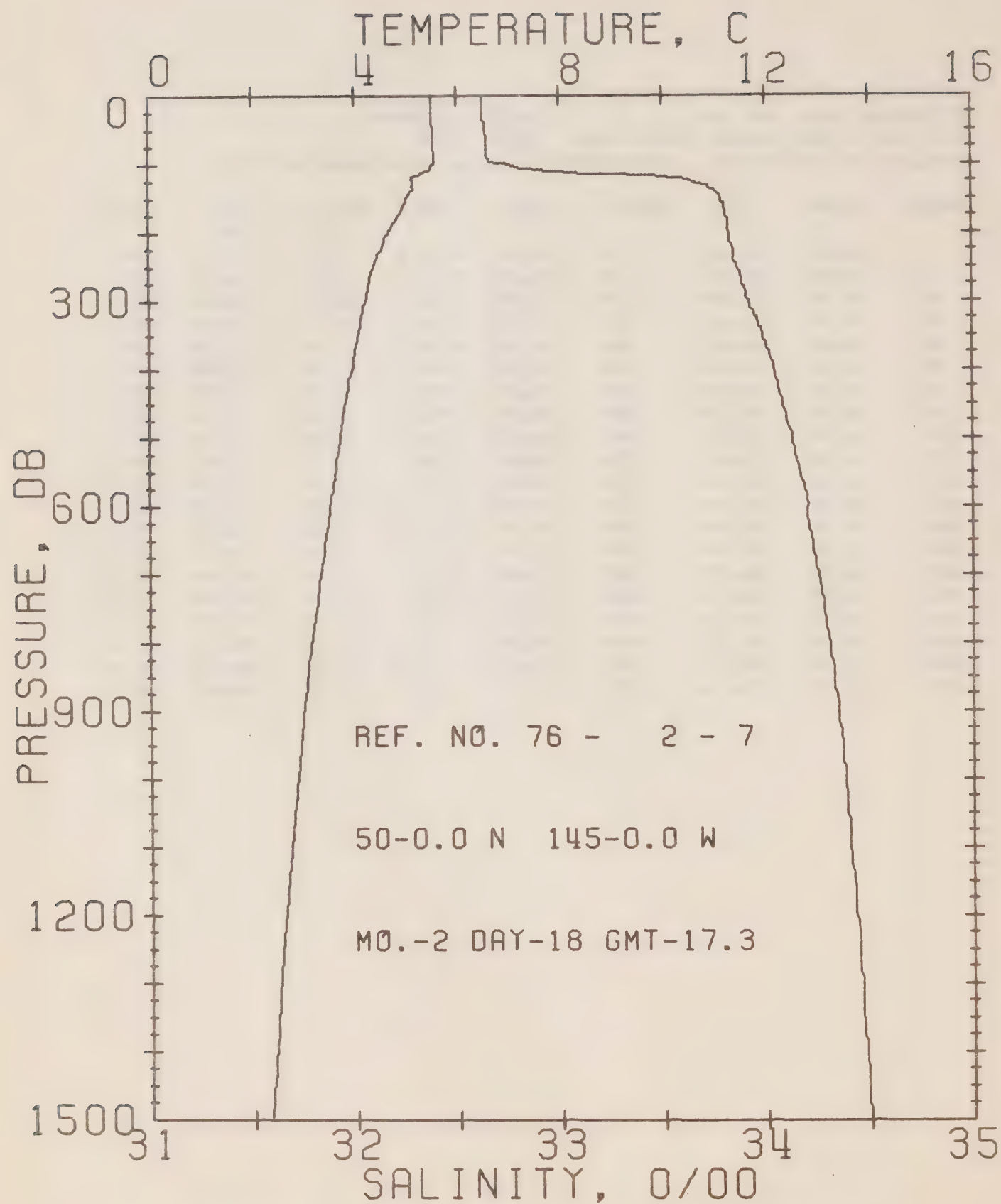
REFERENCE NO. 76- 2- 6

DATE 18/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 2.8

RESULTS OF STP CAST 383 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.62	32.65	0	25.77	223.6	0.0	0.0	1470.
10	5.62	32.65	10	25.77	223.9	0.22	0.01	1471.
20	5.62	32.66	20	25.78	223.3	0.45	0.05	1471.
30	5.62	32.66	30	25.78	223.4	0.67	0.10	1471.
50	5.62	32.66	50	25.78	223.6	1.12	0.28	1471.
75	5.57	32.74	75	25.85	216.9	1.67	0.64	1472.
100	5.08	33.54	99	26.53	152.1	2.16	1.07	1471.
125	5.10	33.77	124	26.71	135.4	2.52	1.48	1472.
150	4.86	33.81	149	26.77	130.0	2.85	1.94	1471.
175	4.68	33.83	174	26.81	126.7	3.17	2.47	1471.
200	4.50	33.85	199	26.84	123.6	3.48	3.07	1471.
225	4.38	33.87	223	26.87	121.0	3.79	3.74	1471.
250	4.26	33.89	248	26.90	118.6	4.09	4.46	1471.
300	4.13	33.96	298	26.97	112.3	4.66	6.07	1471.
400	3.87	34.08	397	27.09	101.5	5.74	9.90	1472.
500	3.70	34.15	496	27.17	95.2	6.73	14.42	1473.
600	3.52	34.20	595	27.23	90.0	7.65	19.60	1474.
800	3.15	34.33	793	27.36	78.2	9.34	31.59	1475.
1000	2.84	34.40	990	27.45	70.9	10.83	45.21	1478.
1200	2.59	34.46	1188	27.51	65.0	12.18	60.43	1480.



## OFFSHORE OCEANOGRAPHY GROUP

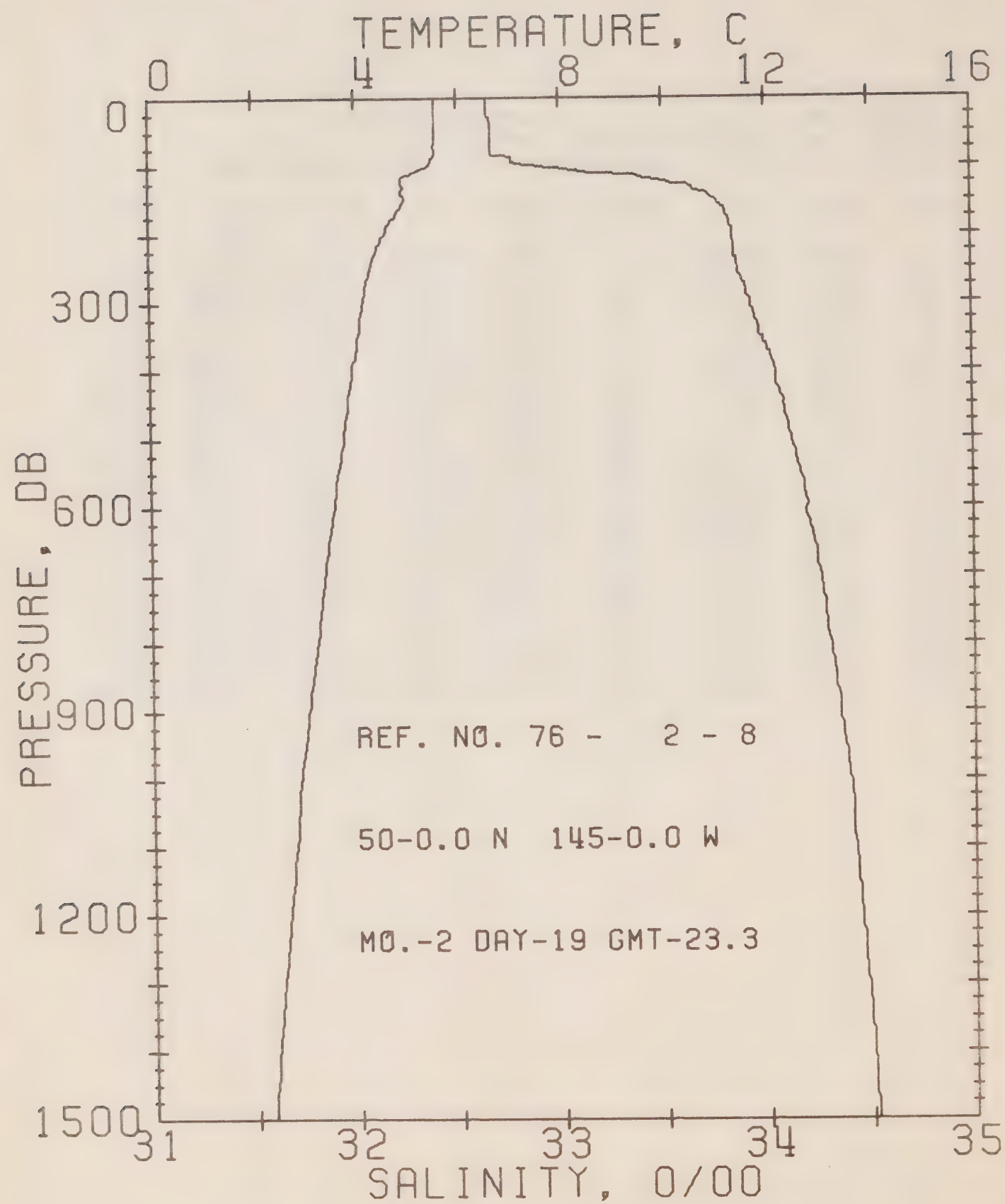
REFERENCE NO. 76- 2- 7

DATE 18/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 361 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.52	32.63	0	25.76	224.0	0.0	0.0	1470.
10	5.52	32.63	10	25.76	224.3	0.22	0.01	1470.
20	5.52	32.63	20	25.76	224.4	0.45	0.05	1470.
30	5.52	32.63	30	25.76	224.5	0.67	0.10	1470.
50	5.54	32.64	50	25.77	224.2	1.12	0.29	1471.
75	5.55	32.65	75	25.78	223.9	1.68	0.64	1471.
100	5.55	32.75	99	25.86	216.6	2.24	1.14	1472.
125	5.15	33.64	124	26.61	145.4	2.70	1.66	1472.
150	5.02	33.78	149	26.74	133.7	3.04	2.15	1472.
175	4.85	33.81	174	26.77	130.2	3.37	2.69	1472.
200	4.65	33.82	199	26.81	127.2	3.69	3.30	1471.
225	4.51	33.85	223	26.84	123.9	4.01	3.99	1471.
250	4.36	33.86	248	26.87	121.9	4.32	4.73	1471.
300	4.21	33.92	298	26.93	116.2	4.91	6.39	1471.
400	3.95	34.04	397	27.05	105.2	6.01	10.31	1472.
500	3.71	34.13	496	27.15	96.8	7.02	14.94	1473.
600	3.50	34.21	595	27.23	89.4	7.95	20.16	1473.
800	3.13	34.31	793	27.34	79.8	9.66	32.27	1475.
1000	2.85	34.38	990	27.43	72.6	11.17	46.14	1478.
1200	2.61	34.43	1188	27.49	67.3	12.57	61.76	1480.





## OFFSHORE OCEANOGRAPHY GROUP

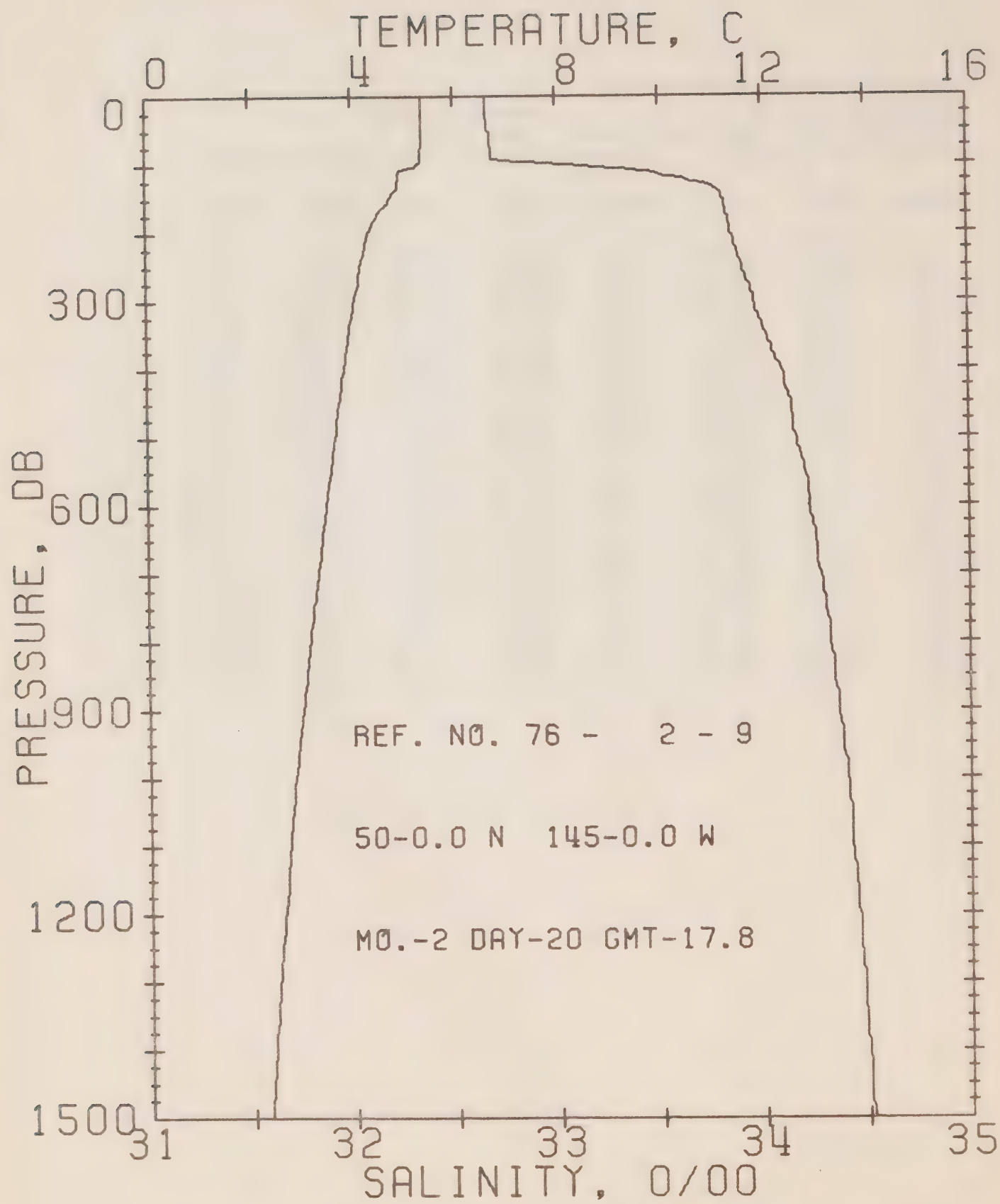
REFERENCE NO. 76- 2- 8

DATE 19/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 23.3

RESULTS OF STP CAST 408 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.57	32.65	0	25.77	223.1	0.0	0.0	1470.
10	5.57	32.65	10	25.77	223.4	0.22	0.01	1470.
20	5.56	32.65	20	25.78	223.4	0.45	0.05	1471.
30	5.56	32.66	30	25.78	222.8	0.67	0.10	1471.
50	5.56	32.67	50	25.79	222.2	1.11	0.28	1471.
75	5.56	32.67	75	25.79	222.4	1.67	0.64	1471.
100	5.42	32.90	99	25.99	203.9	2.21	1.12	1472.
125	4.93	33.55	124	26.56	150.0	2.65	1.61	1471.
150	4.95	33.76	149	26.72	134.7	3.00	2.10	1472.
175	4.76	33.82	174	26.79	123.4	3.32	2.65	1471.
200	4.57	33.84	199	26.83	125.1	3.64	3.25	1471.
225	4.39	33.85	223	26.86	122.7	3.95	3.92	1471.
250	4.29	33.87	248	26.88	120.3	4.25	4.66	1471.
300	4.14	33.93	298	26.95	114.7	4.84	6.30	1471.
400	3.92	34.05	397	27.06	104.5	5.94	10.22	1472.
500	3.76	34.12	496	27.14	98.0	6.96	14.87	1473.
600	3.56	34.20	595	27.22	91.0	7.90	20.14	1474.
800	3.21	34.30	793	27.33	80.8	9.61	32.34	1476.
1000	2.86	34.40	990	27.44	71.5	11.13	46.27	1478.
1200	2.64	34.45	1188	27.50	66.2	12.52	61.74	1480.



## OFFSHORE OCEANOGRAPHY GROUP

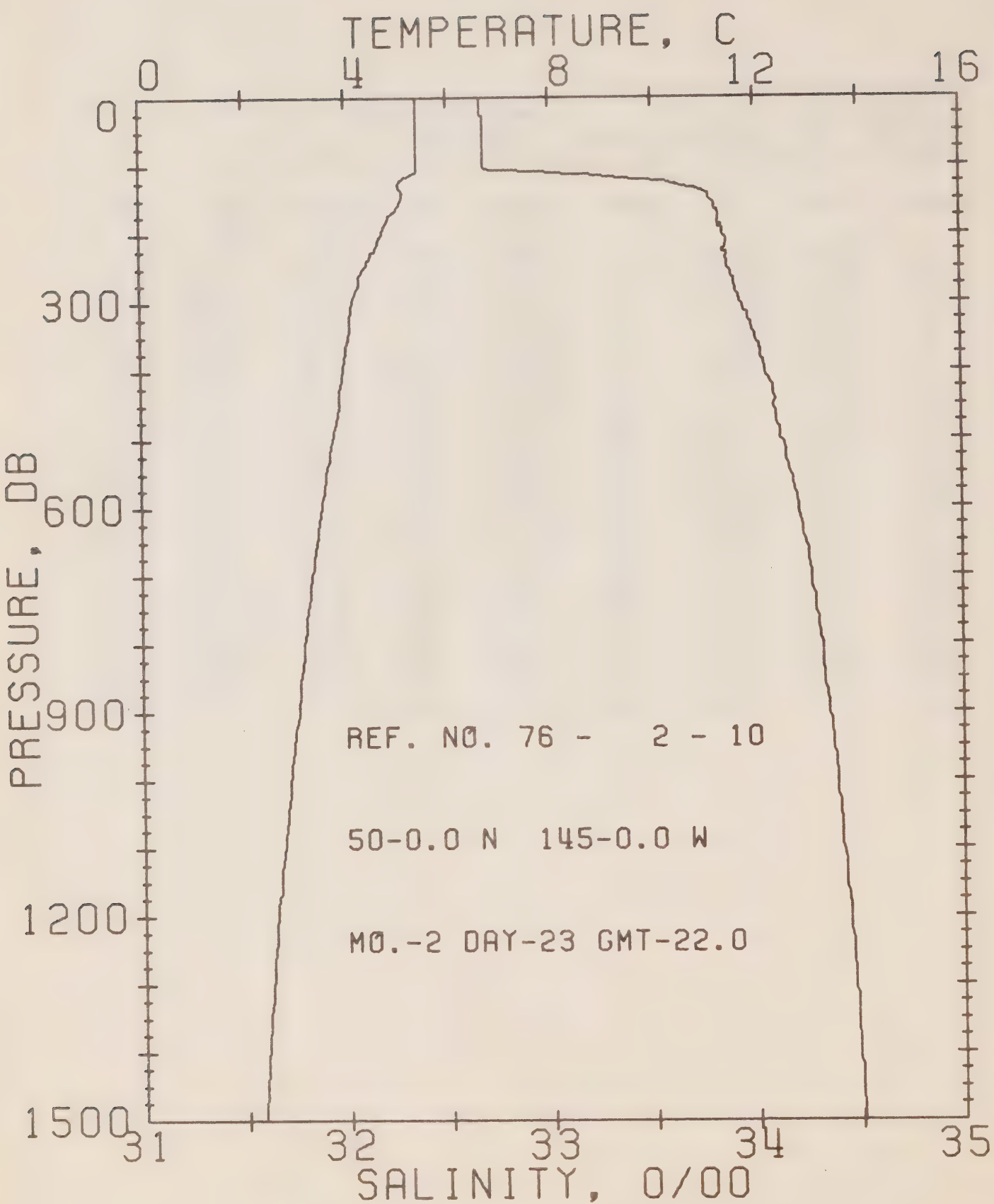
REFERENCE NO. 76- 2- 9

DATE 20/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.8

RESULTS OF STR CAST 375 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.40	32.66	0	25.80	220.4	0.0	0.0	1470.
10	5.40	32.66	10	25.80	220.7	0.22	0.01	1470.
20	5.40	32.66	20	25.80	220.8	0.44	0.05	1470.
30	5.39	32.66	30	25.80	220.8	0.66	0.10	1470.
50	5.40	32.67	50	25.81	220.4	1.10	0.28	1470.
75	5.38	32.68	75	25.82	219.3	1.65	0.63	1471.
100	5.30	33.01	99	26.09	194.3	2.19	1.11	1471.
125	4.92	33.65	124	26.64	142.0	2.59	1.57	1471.
150	4.75	33.81	149	26.79	128.8	2.92	2.03	1471.
175	4.50	33.83	174	26.83	124.5	3.24	2.56	1470.
200	4.32	33.85	199	26.86	121.7	3.55	3.14	1470.
225	4.24	33.88	223	26.90	118.8	3.85	3.79	1470.
250	4.16	33.91	248	26.93	115.9	4.14	4.51	1470.
300	4.03	33.96	298	26.98	111.3	4.71	6.10	1470.
400	3.84	34.09	397	27.11	100.2	5.77	9.87	1471.
500	3.65	34.16	496	27.18	93.8	6.74	14.30	1472.
600	3.47	34.23	595	27.25	87.6	7.64	19.36	1473.
800	3.14	34.32	793	27.35	78.8	9.30	31.17	1475.
1000	2.83	34.40	990	27.45	70.6	10.79	44.82	1477.
1200	2.60	34.46	1188	27.51	65.2	12.15	60.07	1480.
1500	2.31	34.52	1483	27.59	58.9	14.01	85.61	1484.





## OFFSHORE OCEANOGRAPHY GROUP

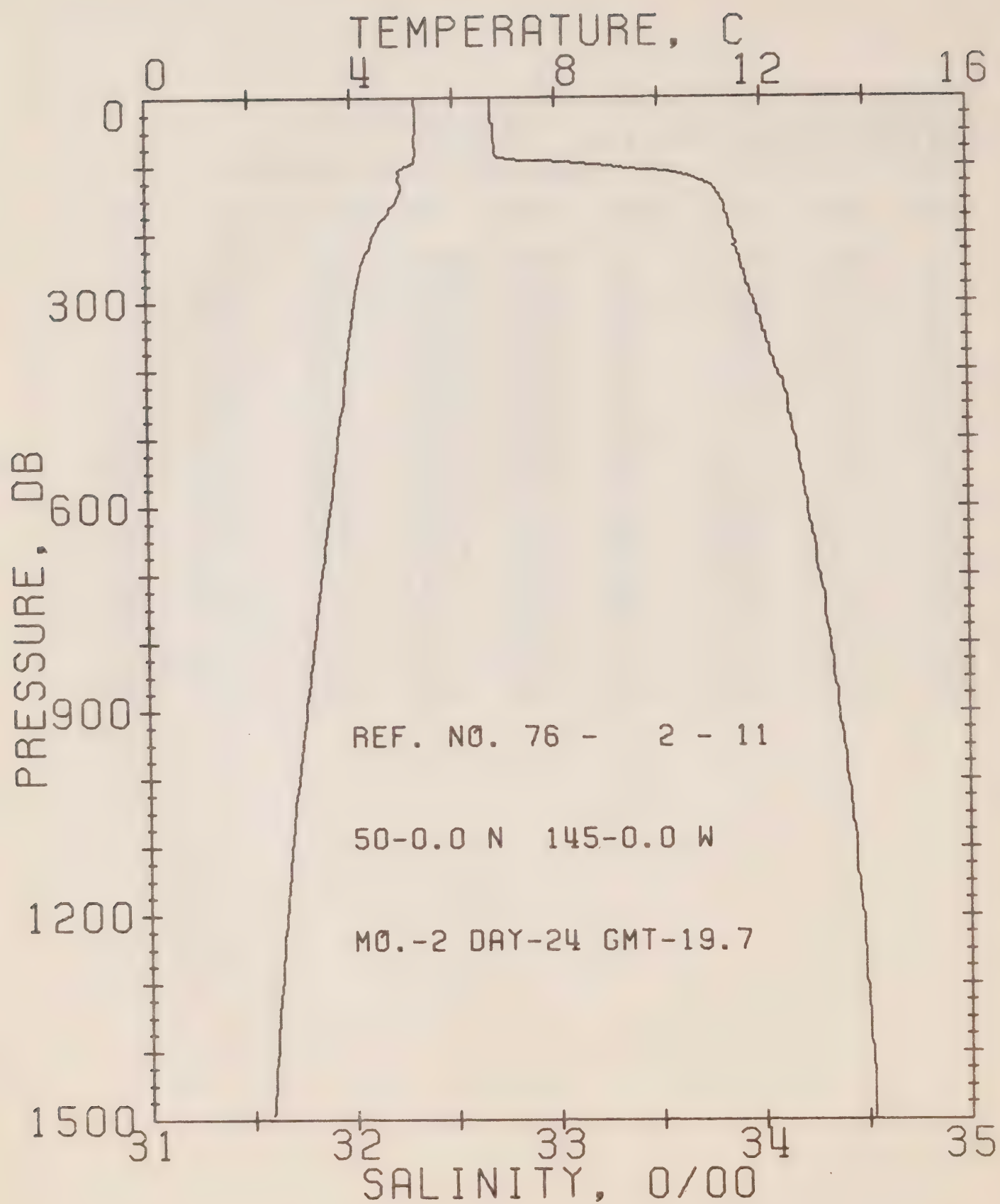
REFERENCE NO. 76- 2- 10

DATE 23/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 22.0

RESULTS OF STP CAST 409 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.42	32.67	0	25.81	219.9	0.0	0.0	1470.
10	5.42	32.67	10	25.81	220.2	0.22	0.01	1470.
20	5.42	32.67	20	25.81	220.3	0.44	0.04	1470.
30	5.42	32.68	30	25.82	219.7	0.66	0.10	1470.
50	5.42	32.68	50	25.82	219.9	1.10	0.28	1470.
75	5.42	32.68	75	25.82	220.1	1.65	0.63	1471.
100	5.42	32.68	99	25.82	220.4	2.20	1.12	1471.
125	5.03	33.61	124	26.60	146.6	2.67	1.65	1471.
150	5.10	33.79	149	26.73	134.1	3.01	2.14	1472.
175	4.85	33.83	174	26.79	128.7	3.34	2.68	1472.
200	4.71	33.85	199	26.82	125.8	3.66	3.29	1472.
225	4.57	33.85	223	26.84	124.6	3.97	3.96	1471.
250	4.37	33.87	248	26.87	121.2	4.28	4.70	1471.
300	4.12	33.93	298	26.95	114.4	4.86	6.35	1471.
400	3.94	34.05	397	27.06	104.4	5.95	10.22	1472.
500	3.74	34.12	496	27.14	97.9	6.96	14.84	1473.
600	3.51	34.21	595	27.23	89.5	7.89	20.06	1474.
800	3.16	34.32	793	27.35	79.0	9.58	32.04	1475.
1000	2.86	34.39	990	27.44	71.9	11.09	45.92	1478.
1200	2.59	34.45	1188	27.51	65.6	12.47	61.36	1480.



## OFFSHORE OCEANOGRAPHY GROUP

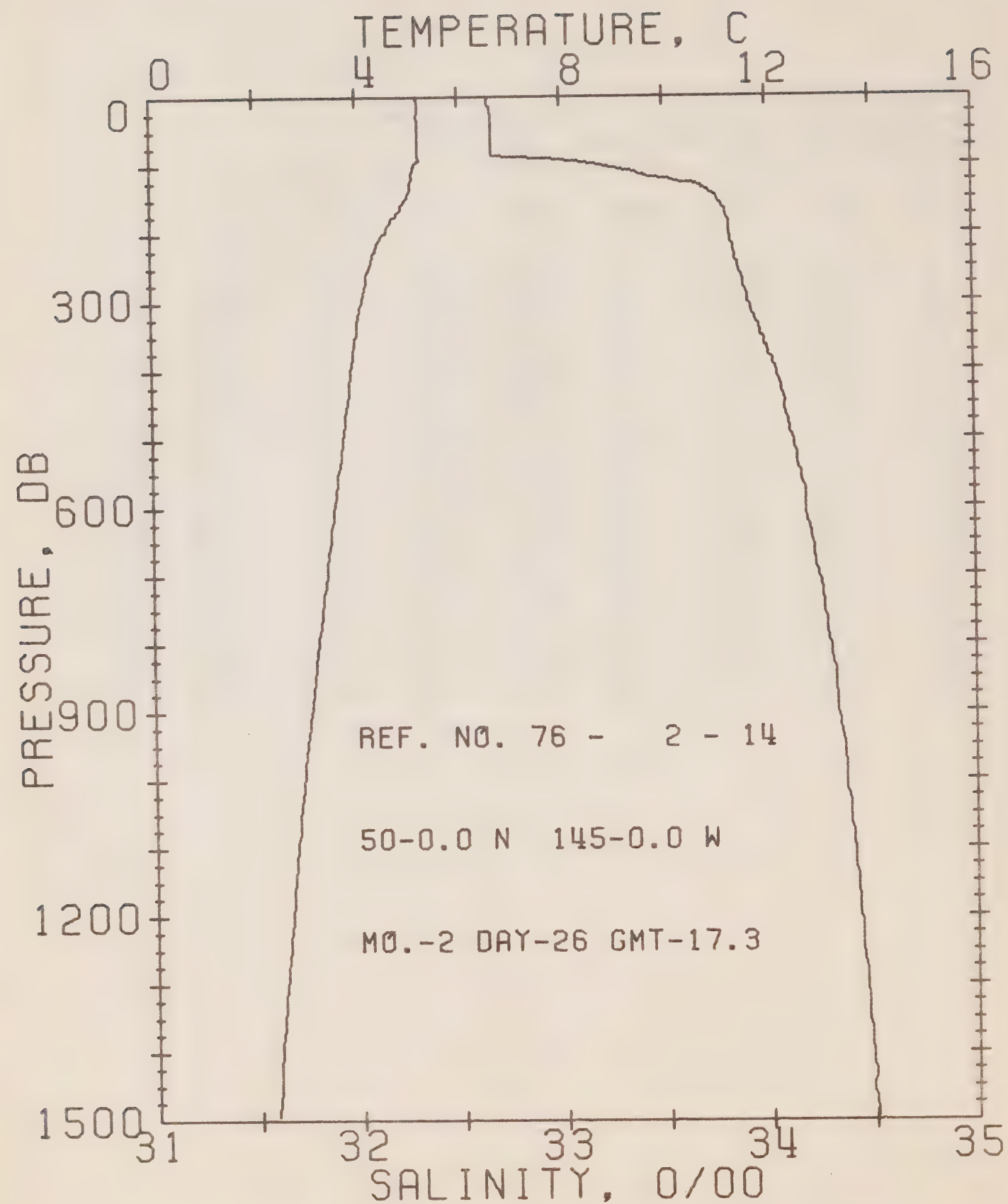
REFERENCE NO. 76- 2- 11

DATE 24/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 19.7

RESULTS OF STP CAST 386 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.24	32.68	0	25.84	217.2	0.0	0.0	1469.
10	5.26	32.69	10	25.84	217.0	0.22	0.01	1469.
20	5.27	32.69	20	25.84	217.1	0.43	0.04	1469.
30	5.27	32.69	30	25.84	217.2	0.65	0.10	1470.
50	5.27	32.70	50	25.85	216.7	1.08	0.28	1470.
75	5.27	32.71	75	25.86	216.2	1.63	0.62	1470.
100	5.12	33.25	99	26.30	174.3	2.14	1.08	1471.
125	4.98	33.73	124	26.70	136.6	2.52	1.51	1471.
150	4.90	33.81	149	26.77	130.5	2.85	1.97	1471.
175	4.67	33.84	174	26.82	125.9	3.17	2.50	1471.
200	4.45	33.87	199	26.87	121.6	3.48	3.09	1470.
225	4.32	33.89	223	26.90	118.9	3.78	3.74	1470.
250	4.19	33.91	248	26.93	116.2	4.07	4.46	1470.
300	4.05	33.97	298	26.99	110.7	4.64	6.05	1471.
400	3.88	34.07	397	27.09	102.0	5.71	9.84	1472.
500	3.72	34.16	496	27.17	94.4	6.68	14.32	1473.
600	3.56	34.22	595	27.24	89.2	7.60	19.46	1474.
800	3.23	34.33	793	27.35	79.0	9.23	31.43	1476.
1000	2.90	34.41	990	27.45	70.9	10.79	45.18	1478.
1200	2.64	34.48	1188	27.53	63.9	12.13	60.26	1480.





## OFFSHORE OCEANOGRAPHY GROUP

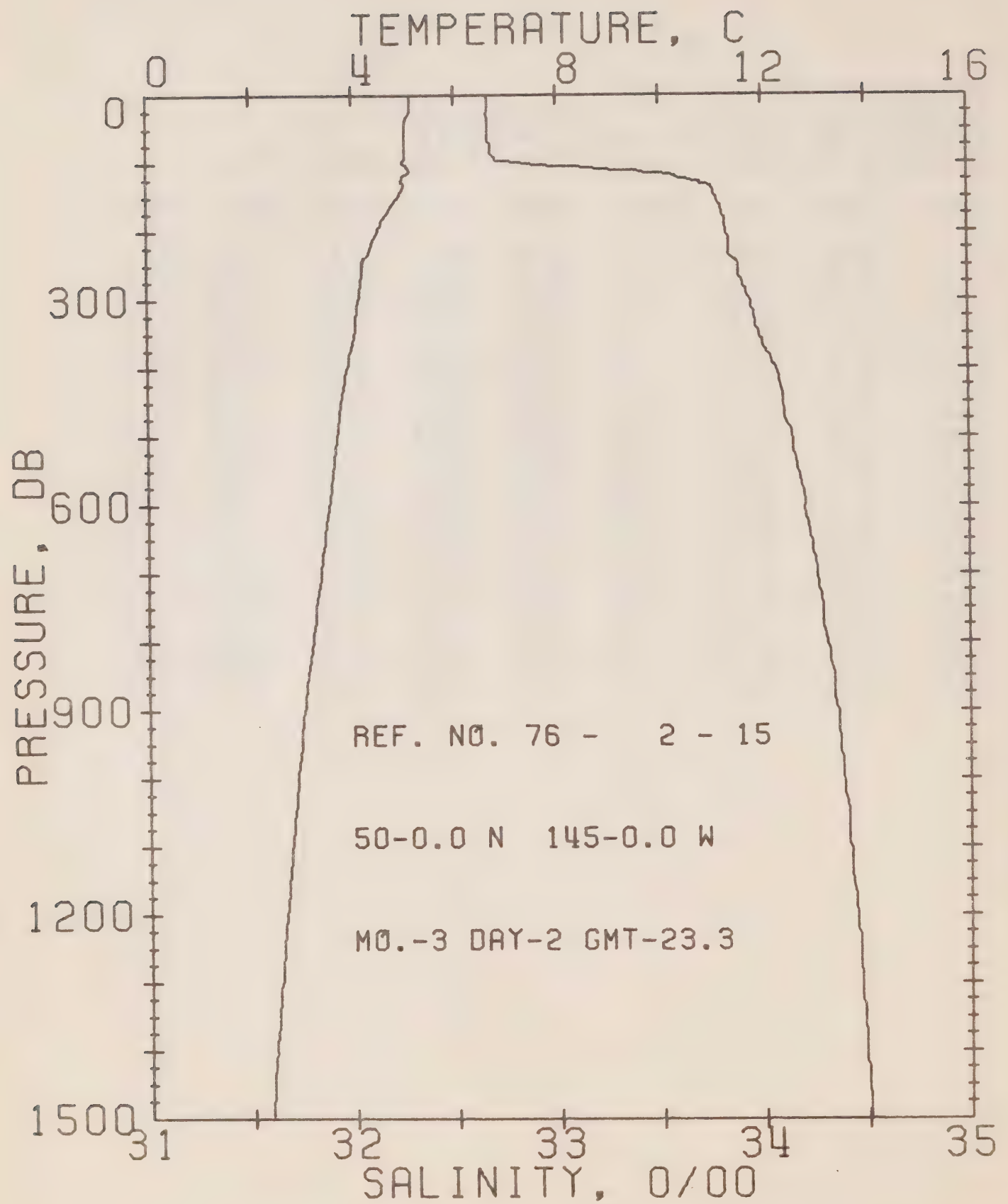
REFERENCE NO. 76- 2- 14

DATE 26/ 2/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 375 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.20	32.66	0	25.83	218.2	0.0	0.0	1469.
10	5.22	32.65	10	25.81	219.6	0.22	0.01	1469.
20	5.22	32.66	20	25.82	218.8	0.44	0.04	1469.
30	5.21	32.67	30	25.83	218.1	0.66	0.10	1469.
50	5.22	32.67	50	25.83	218.4	1.09	0.28	1470.
75	5.22	32.67	75	25.83	218.6	1.64	0.63	1470.
100	5.14	33.20	99	26.26	178.2	2.15	1.08	1471.
125	5.08	33.59	124	26.57	148.7	2.57	1.55	1471.
150	4.96	33.76	149	26.72	134.8	2.91	2.04	1472.
175	4.76	33.81	174	26.78	129.1	3.24	2.59	1471.
200	4.55	33.82	199	26.82	126.4	3.56	3.20	1471.
225	4.37	33.84	223	26.85	123.2	3.87	3.87	1471.
250	4.25	33.86	248	26.88	120.6	4.18	4.61	1470.
300	4.09	33.91	298	26.94	115.7	4.77	6.25	1471.
400	3.87	34.04	397	27.06	104.5	5.87	10.17	1472.
500	3.72	34.12	496	27.14	97.4	6.88	14.79	1473.
600	3.53	34.18	595	27.21	92.0	7.82	20.09	1474.
800	3.19	34.29	793	27.33	81.2	9.55	32.39	1476.
1000	2.89	34.37	990	27.42	73.6	11.09	46.52	1478.
1200	2.64	34.43	1188	27.49	67.6	12.50	62.26	1480.



## OFFSHORE OCEANOGRAPHY GROUP

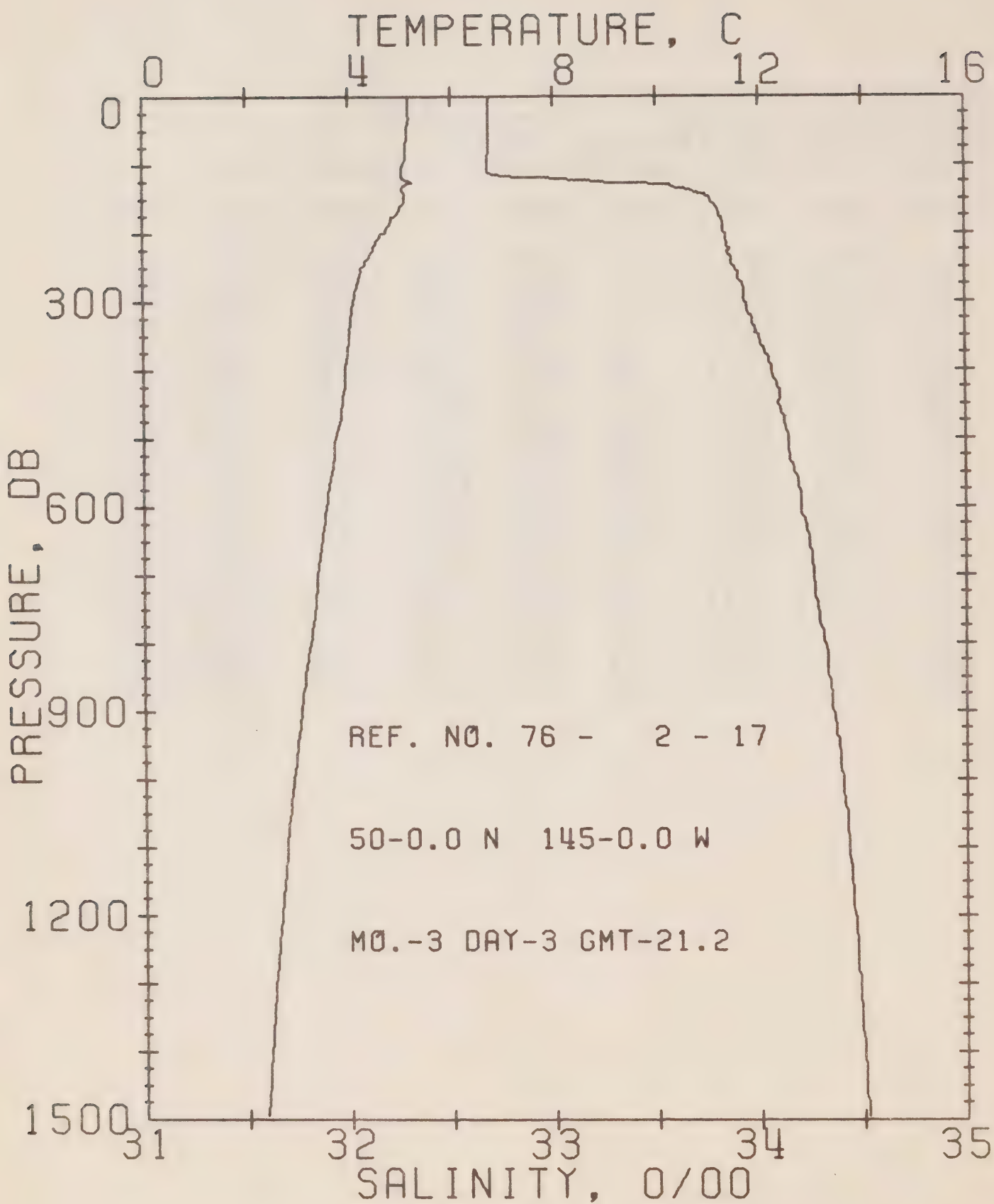
REFERENCE NO. 76- 2- 15

DATE 2/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 23.3

RESULTS OF STP CAST 379 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.16	32.67	0	25.84	217.1	0.0	0.0	1469.
10	5.16	32.67	10	25.84	217.4	0.22	0.01	1469.
20	5.15	32.67	20	25.84	217.4	0.43	0.04	1469.
30	5.10	32.66	30	25.84	217.7	0.65	0.10	1469.
50	5.04	32.67	50	25.85	216.5	1.09	0.28	1469.
75	5.03	32.68	75	25.86	215.8	1.63	0.62	1469.
100	4.98	32.84	99	25.99	203.5	2.16	1.10	1470.
125	4.97	33.67	124	26.65	141.4	2.58	1.57	1471.
150	4.89	33.78	149	26.75	132.5	2.92	2.05	1471.
175	4.65	33.81	174	26.80	127.9	3.24	2.59	1471.
200	4.49	33.83	199	26.83	125.0	3.56	3.19	1471.
225	4.34	33.84	223	26.85	122.8	3.87	3.86	1470.
250	4.22	33.88	248	26.90	119.1	4.17	4.59	1470.
300	4.11	33.94	298	26.96	113.6	4.75	6.22	1471.
400	3.88	34.07	397	27.08	102.3	5.84	10.10	1472.
500	3.68	34.14	496	27.16	95.7	6.83	14.64	1473.
600	3.52	34.21	595	27.23	89.6	7.76	19.84	1474.
800	3.19	34.31	793	27.34	80.1	9.46	31.93	1476.
1000	2.88	34.38	990	27.43	72.6	10.98	45.81	1478.
1200	2.65	34.45	1188	27.50	66.3	12.37	61.38	1480.





## OFFSHORE OCEANOGRAPHY GROUP

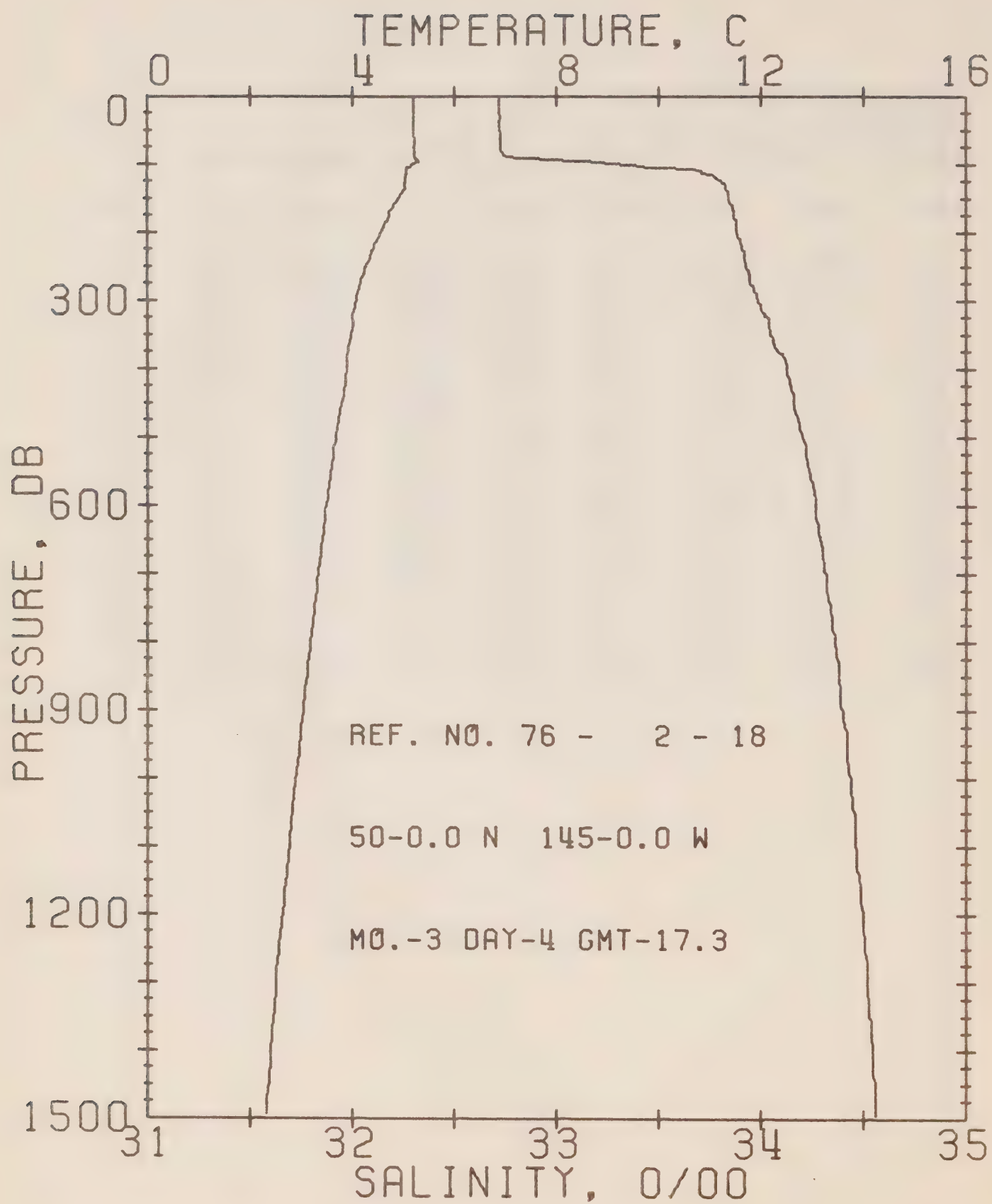
REFERENCE NO. 76- 2- 17

DATE 3/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 21.2

RESULTS OF STP CAST 385 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.18	32.70	0	25.86	215.0	0.0	0.0	1469.
10	5.18	32.69	10	25.85	216.1	0.22	0.01	1469.
20	5.18	32.69	20	25.85	216.2	0.43	0.04	1469.
30	5.19	32.69	30	25.85	216.4	0.65	0.10	1469.
50	5.15	32.69	50	25.85	216.1	1.08	0.28	1469.
75	5.13	32.69	75	25.86	216.2	1.62	0.62	1470.
100	5.07	32.68	99	25.86	216.5	2.16	1.10	1470.
125	5.25	33.32	124	26.34	170.8	2.68	1.69	1472.
150	5.10	33.76	149	26.71	136.4	3.04	2.20	1472.
175	4.87	33.81	174	26.77	130.3	3.38	2.75	1472.
200	4.68	33.84	199	26.82	126.3	3.70	3.37	1471.
225	4.46	33.86	223	26.85	122.9	4.01	4.04	1471.
250	4.25	33.88	248	26.89	119.2	4.31	4.77	1470.
300	4.08	33.93	298	26.95	114.0	4.89	6.40	1471.
400	3.93	34.06	397	27.07	103.6	5.98	10.27	1472.
500	3.73	34.14	496	27.15	96.3	6.98	14.85	1473.
600	3.54	34.20	595	27.22	90.7	7.91	20.08	1474.
800	3.21	34.31	793	27.34	80.2	9.62	32.20	1476.
1000	2.87	34.40	990	27.44	71.3	11.13	46.05	1478.
1200	2.64	34.46	1188	27.51	65.6	12.50	61.38	1480.



## OFFSHORE OCEANOGRAPHY GROUP

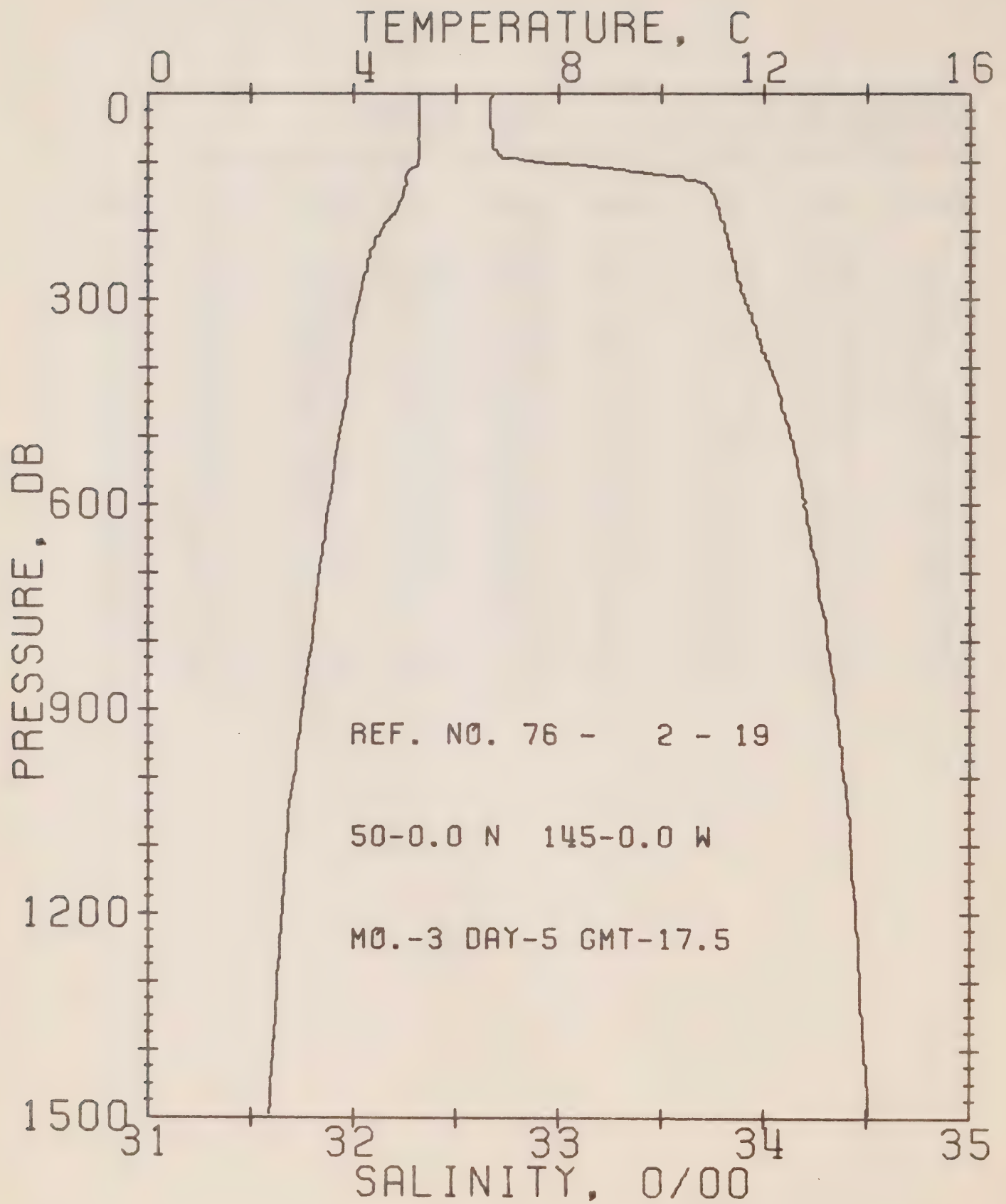
REFERENCE NO. 76- 2- 18

DATE 4/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 422 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.20	32.72	0	25.87	213.7	0.0	0.0	1469.
10	5.20	32.72	10	25.87	214.0	0.21	0.01	1469.
20	5.20	32.72	20	25.87	214.1	0.43	0.04	1469.
30	5.19	32.73	30	25.88	213.5	0.64	0.10	1469.
50	5.21	32.72	50	25.87	214.5	1.07	0.27	1470.
75	5.22	32.73	75	25.88	214.1	1.61	0.61	1470.
100	5.17	33.34	99	26.37	168.1	2.11	1.06	1471.
125	5.05	33.81	124	26.75	131.9	2.47	1.47	1472.
150	4.90	33.84	149	26.79	128.2	2.79	1.92	1471.
175	4.71	33.87	174	26.84	124.1	3.10	2.44	1471.
200	4.54	33.88	199	26.86	121.8	3.41	3.03	1471.
225	4.40	33.91	223	26.91	117.9	3.71	3.68	1471.
250	4.26	33.93	248	26.93	115.5	4.00	4.38	1471.
300	4.07	33.99	298	27.00	109.5	4.57	5.06	1471.
400	3.89	34.13	397	27.13	97.9	5.60	9.65	1472.
500	3.69	34.20	496	27.21	91.2	6.55	13.99	1473.
600	3.49	34.27	595	27.28	84.8	7.43	18.90	1474.
800	3.18	34.36	793	27.38	76.3	9.04	30.38	1476.
1000	2.89	34.44	990	27.47	68.5	10.49	43.65	1478.
1200	2.63	34.50	1188	27.54	62.4	11.80	58.36	1480.





## OFFSHORE OCEANOGRAPHY GROUP

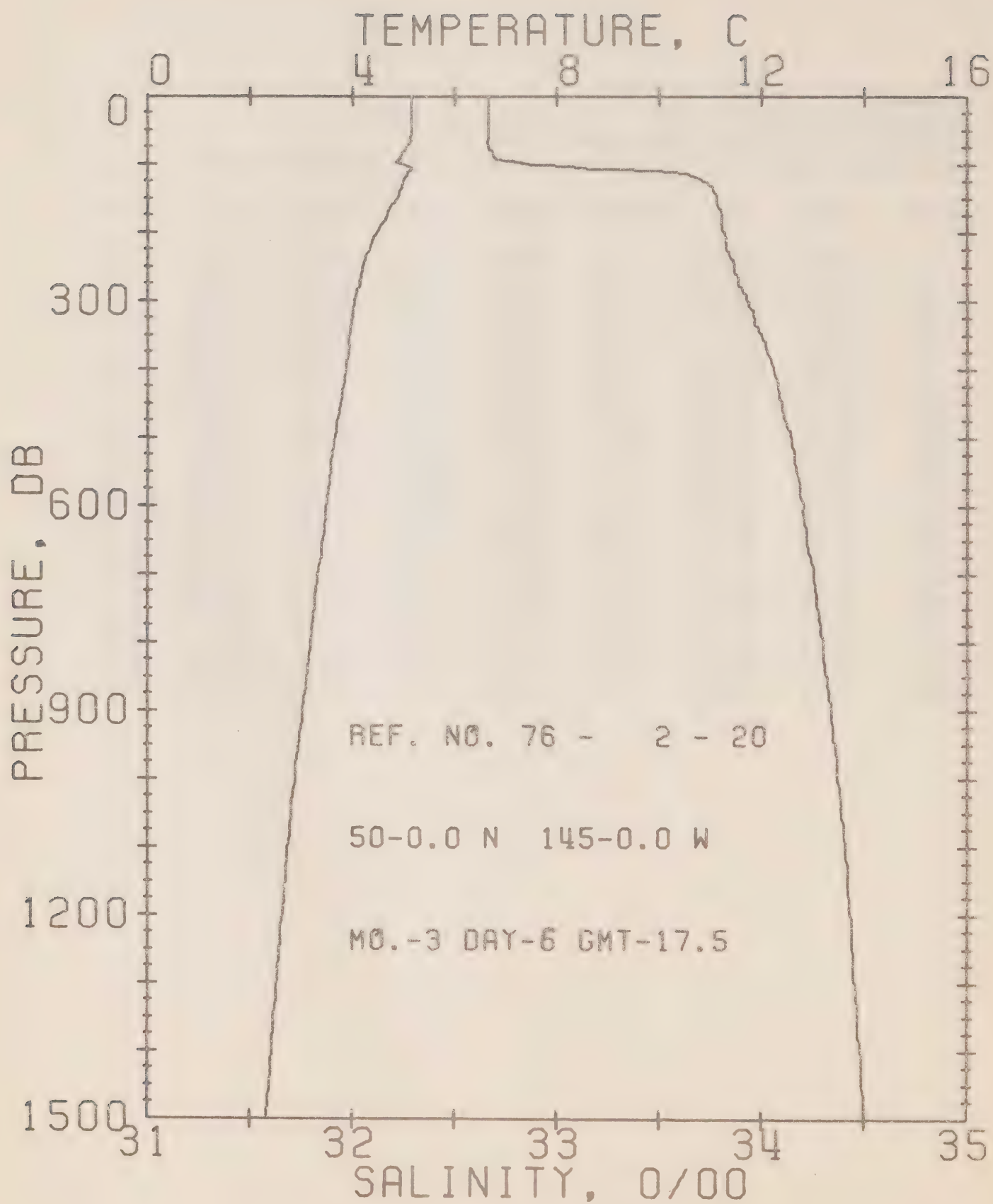
REFERENCE NO. 76- 2- 19

DATE 5/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.5

RESULTS OF STP CAST 436 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.27	32.68	0	25.83	217.5	0.0	0.0	1469.
10	5.27	32.67	10	25.82	218.6	0.22	0.01	1469.
20	5.27	32.67	20	25.82	218.7	0.44	0.04	1469.
30	5.27	32.67	30	25.82	218.7	0.66	0.10	1470.
50	5.27	32.67	50	25.82	218.9	1.09	0.28	1470.
75	5.27	32.68	75	25.83	218.5	1.64	0.63	1470.
100	5.26	32.89	99	26.00	202.9	2.18	1.11	1471.
125	5.02	33.62	124	26.60	145.8	2.60	1.59	1471.
150	4.96	33.75	149	26.71	135.6	2.94	2.07	1472.
175	4.79	33.78	174	26.76	131.8	3.28	2.62	1471.
200	4.53	33.81	199	26.81	126.9	3.60	3.24	1471.
225	4.35	33.83	223	26.84	123.7	3.91	3.91	1470.
250	4.26	33.86	248	26.88	120.7	4.22	4.65	1470.
300	4.10	33.91	298	26.93	115.8	4.81	6.31	1471.
400	3.92	34.03	397	27.05	105.8	5.92	10.26	1472.
500	3.71	34.13	496	27.15	97.0	6.93	14.90	1473.
600	3.50	34.19	595	27.22	90.6	7.87	20.13	1473.
800	3.19	34.31	793	27.34	80.0	9.57	32.24	1476.
1000	2.84	34.39	990	27.44	71.7	11.08	45.08	1478.
1200	2.61	34.45	1188	27.51	65.8	12.45	61.37	1480.



## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 2- 20

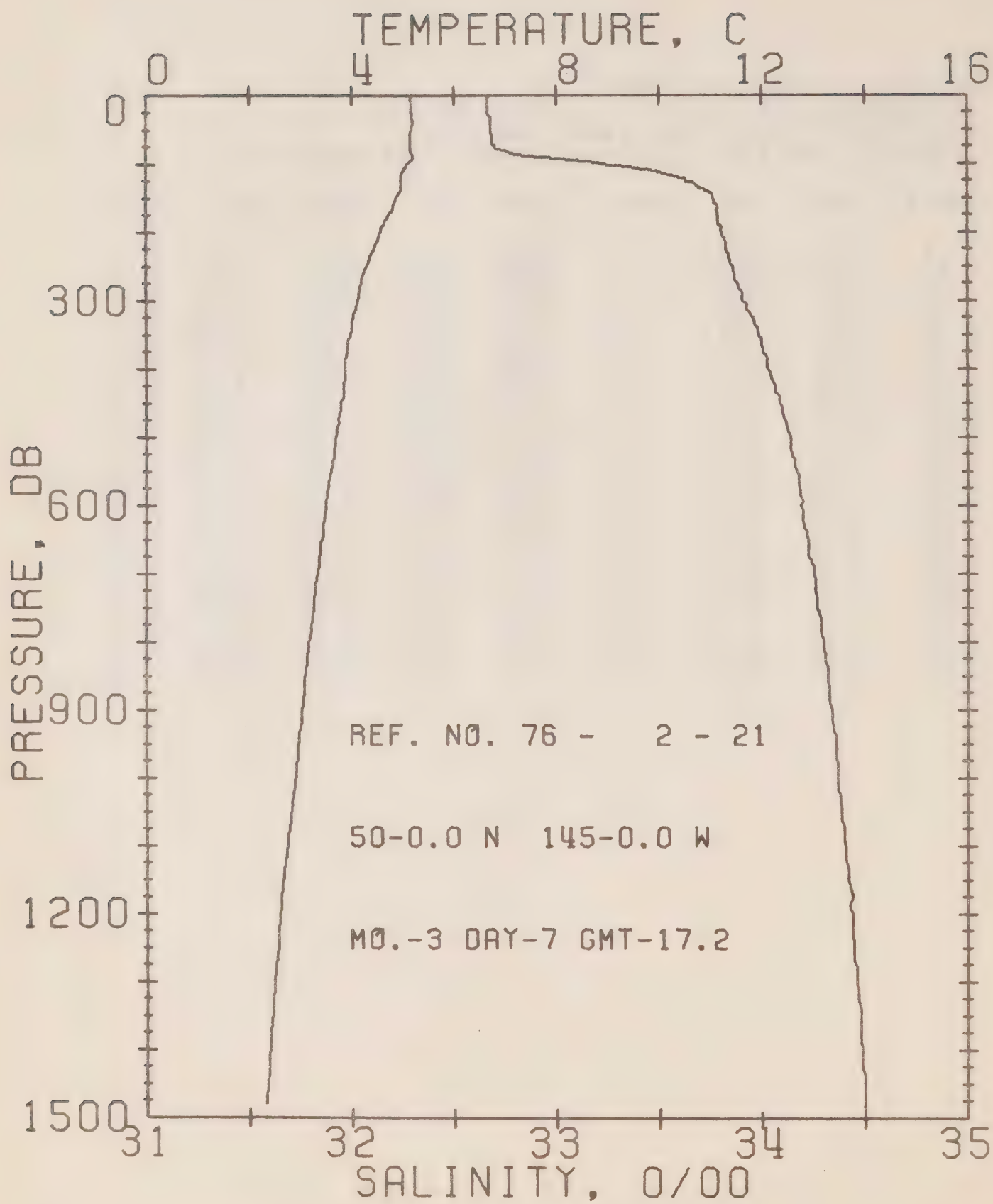
DATE 6/ 3/76

POSITION 50- 0.0N, 145- 0.0W

GMT 17.5

RESULTS OF STP CAST 442 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.17	32.67	0	25.84	217.2	0.0	0.0	1469.
10	5.16	32.67	10	25.84	217.4	0.22	0.01	1469.
20	5.16	32.67	20	25.84	217.5	0.43	0.04	1469.
30	5.16	32.67	30	25.84	217.6	0.65	0.10	1469.
50	5.15	32.67	50	25.84	217.7	1.09	0.28	1469.
75	5.04	32.67	75	25.85	216.7	1.63	0.62	1469.
100	5.04	32.89	99	26.02	200.4	2.16	1.10	1470.
125	4.98	33.73	124	26.70	137.1	2.55	1.54	1471.
150	4.87	33.78	149	26.75	132.3	2.89	2.01	1471.
175	4.66	33.81	174	26.80	128.1	3.21	2.55	1471.
200	4.46	33.82	199	26.82	125.4	3.53	3.16	1470.
225	4.32	33.83	223	26.85	123.1	3.84	3.83	1470.
250	4.20	33.87	248	26.89	119.4	4.14	4.56	1470.
300	4.03	33.94	298	26.97	112.7	4.73	6.19	1470.
400	3.87	34.06	397	27.08	102.9	5.81	10.03	1472.
500	3.64	34.14	496	27.17	94.9	6.80	14.57	1472.
600	3.48	34.21	595	27.23	89.2	7.72	19.75	1473.
800	3.17	34.30	793	27.34	80.6	9.43	31.90	1476.
1000	2.87	34.37	990	27.42	73.5	10.97	45.93	1478.
1200	2.63	34.43	1188	27.49	67.4	12.37	61.66	1480.





## OFFSHORE OCEANOGRAPHY GROUP

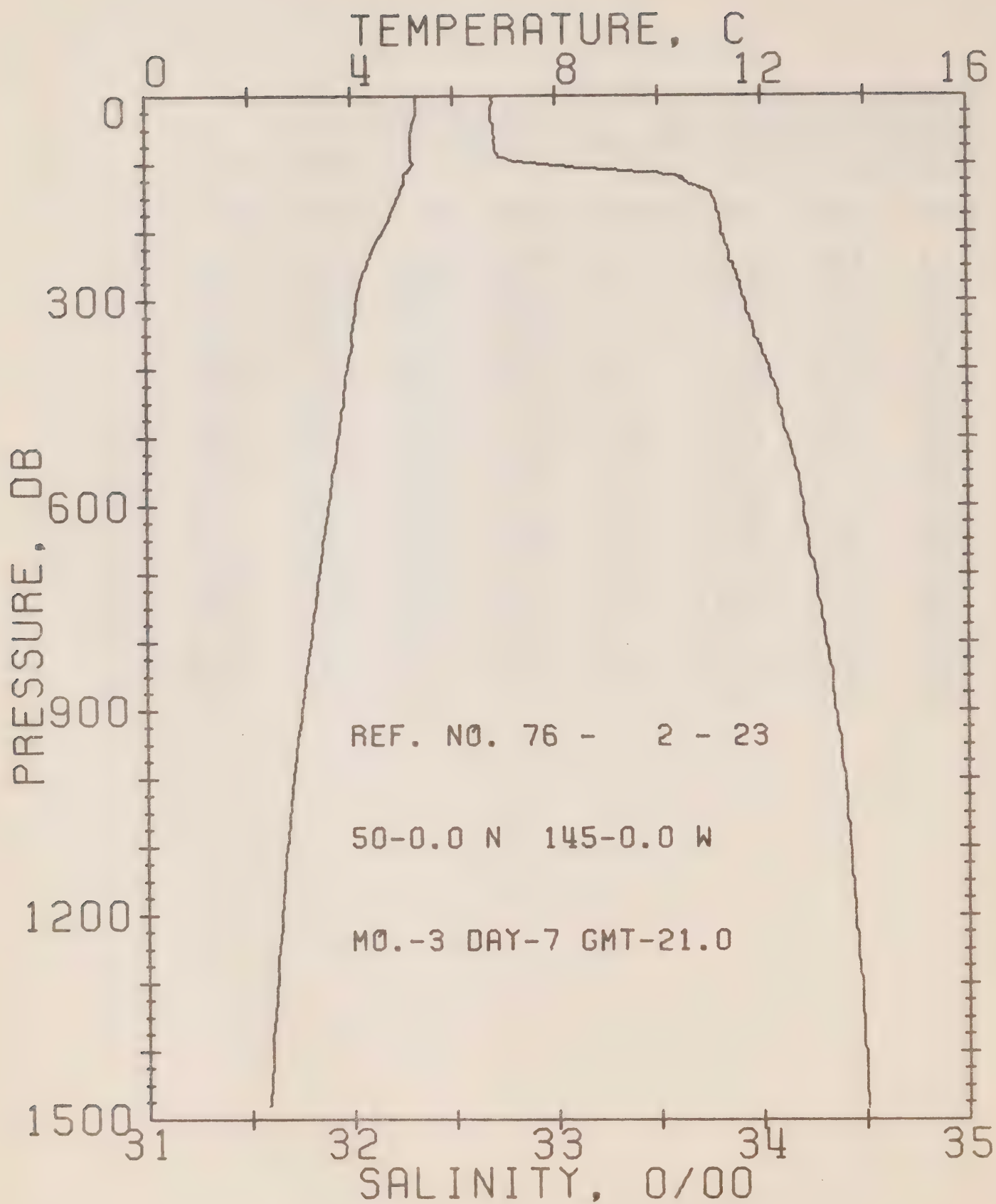
REFERENCE NO. 76- 2- 21

DATE 7/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.2

RESULTS OF STP CAST 484 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.17	32.68	0	25.84	216.4	0.0	0.0	1469.
10	5.17	32.67	10	25.84	217.5	0.22	0.01	1469.
20	5.17	32.67	20	25.84	217.6	0.43	0.04	1469.
30	5.17	32.67	30	25.84	217.3	0.65	0.10	1469.
50	5.17	32.68	50	25.84	217.1	1.09	0.28	1469.
75	5.16	32.70	75	25.86	215.7	1.63	0.62	1470.
100	5.09	33.22	99	26.28	176.3	2.13	1.07	1471.
125	4.96	33.63	124	26.62	144.3	2.52	1.51	1471.
150	4.86	33.76	149	26.73	133.7	2.87	2.00	1471.
175	4.70	33.79	174	26.78	130.0	3.19	2.54	1471.
200	4.55	33.80	199	26.80	127.8	3.52	3.16	1471.
225	4.42	33.83	223	26.84	124.5	3.83	3.84	1471.
250	4.28	33.86	248	26.88	120.9	4.14	4.58	1471.
300	4.11	33.91	298	26.93	115.9	4.73	6.24	1471.
400	3.86	34.03	397	27.05	105.1	5.82	10.12	1471.
500	3.69	34.14	496	27.16	95.9	6.83	14.72	1473.
600	3.49	34.19	595	27.22	90.6	7.76	19.94	1473.
800	3.16	34.30	793	27.34	80.5	9.47	32.10	1475.
1000	2.89	34.37	990	27.42	73.7	11.00	46.17	1478.
1200	2.59	34.44	1188	27.50	66.4	12.40	61.84	1480.



## OFFSHORE OCEANOGRAPHY GROUP

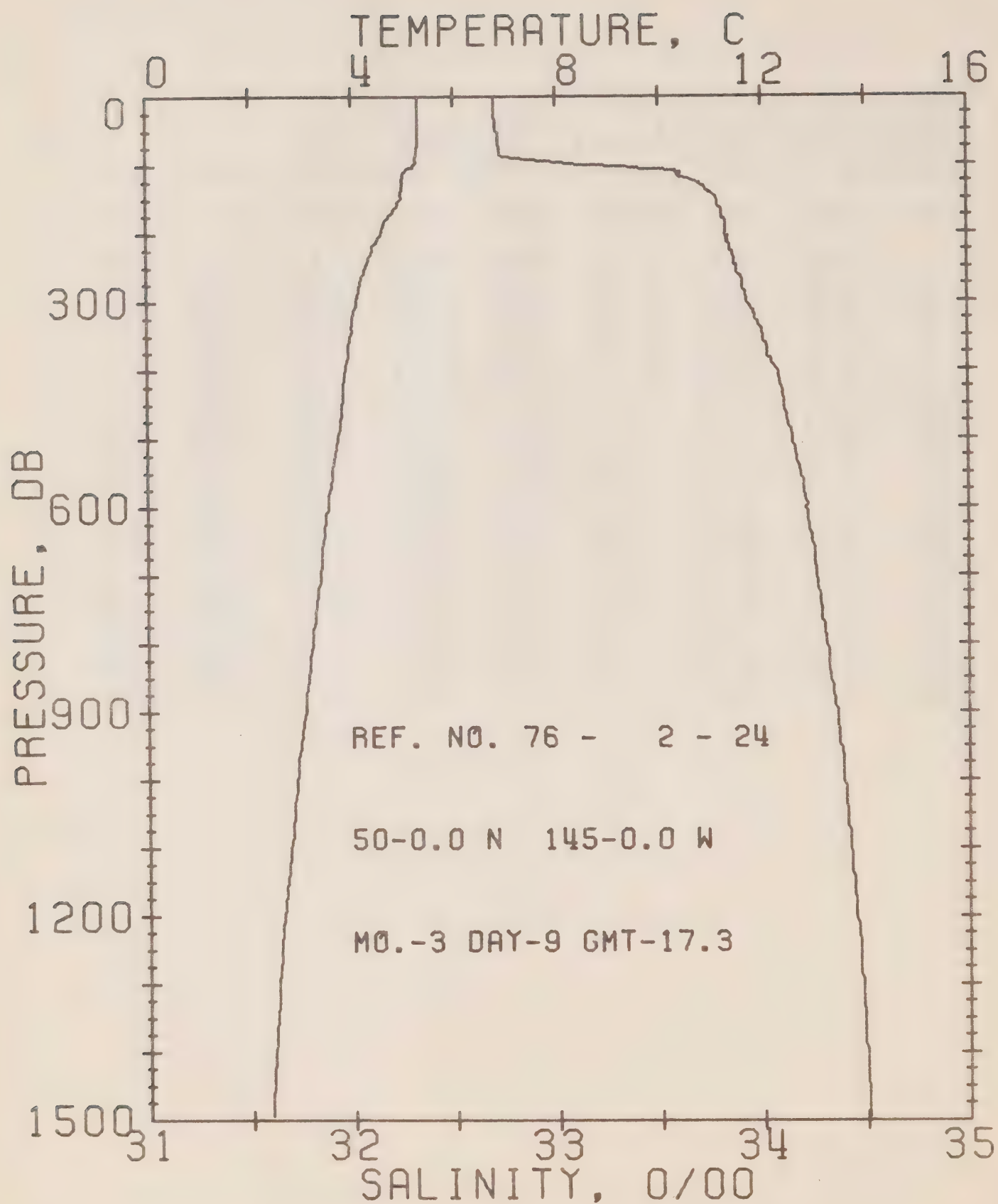
REFERENCE NO. 76- 2- 23

DATE 7/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 21.0

RESULTS OF STP CAST 459 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	PJT. EN	SOUND
0	5.28	32.70	0	25.85	216.1	0.0	0.0	1469.
10	5.28	32.70	10	25.85	216.6	0.22	0.01	1469.
20	5.28	32.69	20	25.84	217.3	0.43	0.04	1469.
30	5.26	32.69	30	25.84	217.1	0.65	0.10	1469.
50	5.19	32.70	50	25.86	215.9	1.08	0.28	1470.
75	5.17	32.71	75	25.87	215.1	1.62	0.62	1470.
100	5.22	32.94	99	26.04	198.6	2.15	1.09	1471.
125	5.03	33.64	124	26.62	144.3	2.57	1.56	1471.
150	4.91	33.77	149	26.74	133.5	2.91	2.04	1471.
175	4.77	33.80	174	26.78	130.0	3.24	2.59	1471.
200	4.62	33.81	199	26.80	127.9	3.56	3.20	1471.
225	4.41	33.84	223	26.85	123.6	3.88	3.89	1471.
250	4.29	33.87	248	26.88	120.3	4.18	4.62	1471.
300	4.09	33.92	298	26.94	114.9	4.77	6.27	1471.
400	3.91	34.04	397	27.06	104.9	5.87	10.20	1472.
500	3.73	34.13	496	27.15	97.0	6.88	14.92	1473.
600	3.53	34.21	595	27.23	89.7	7.82	20.06	1474.
800	3.17	34.31	793	27.34	79.9	9.52	32.18	1476.
1000	2.83	34.40	990	27.45	70.8	11.02	45.95	1477.
1200	2.59	34.45	1188	27.51	65.6	12.39	61.22	1480.





## OFFSHORE OCEANOGRAPHY GROUP

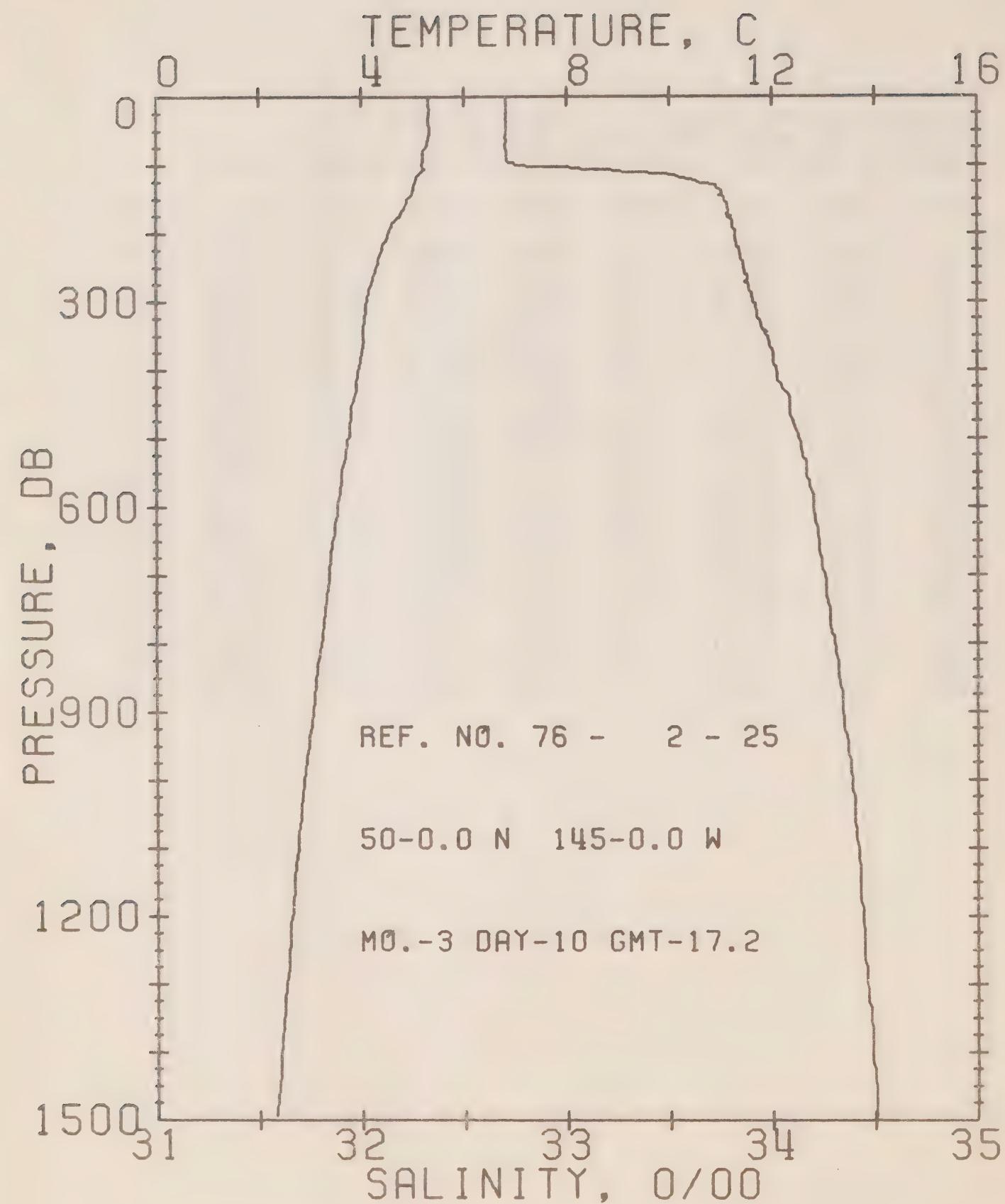
REFERENCE NO. 76- 2- 24

DATE 9/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 497 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	PJT. EN	SOUND
0	5.31	32.70	0	25.84	216.4	0.0	0.0	1469.
10	5.31	32.70	10	25.84	216.8	0.22	0.01	1469.
20	5.31	32.70	20	25.84	216.9	0.43	0.04	1470.
30	5.32	32.70	30	25.84	217.0	0.65	0.10	1470.
50	5.32	32.71	50	25.85	216.5	1.08	0.28	1470.
75	5.29	32.73	75	25.87	214.9	1.62	0.62	1470.
100	5.22	33.10	99	26.17	186.7	2.14	1.08	1471.
125	5.00	33.69	124	26.66	140.3	2.52	1.52	1471.
150	4.96	33.78	149	26.74	133.4	2.86	1.99	1472.
175	4.72	33.81	174	26.79	128.8	3.19	2.54	1471.
200	4.58	33.83	199	26.82	126.0	3.51	3.14	1471.
225	4.39	33.85	223	26.86	122.7	3.82	3.81	1471.
250	4.26	33.88	248	26.89	119.3	4.12	4.54	1471.
300	4.08	33.93	298	26.95	114.0	4.70	6.17	1471.
400	3.85	34.07	397	27.09	101.7	5.78	10.01	1472.
500	3.71	34.15	496	27.16	95.3	6.77	14.53	1473.
600	3.51	34.22	595	27.24	89.0	7.69	19.69	1474.
800	3.19	34.31	793	27.34	80.0	9.38	31.72	1476.
1000	2.88	34.39	990	27.43	72.1	10.89	45.60	1478.
1200	2.62	34.45	1188	27.50	66.0	12.27	61.02	1480.



## OFFSHORE OCEANOGRAPHY GROUP

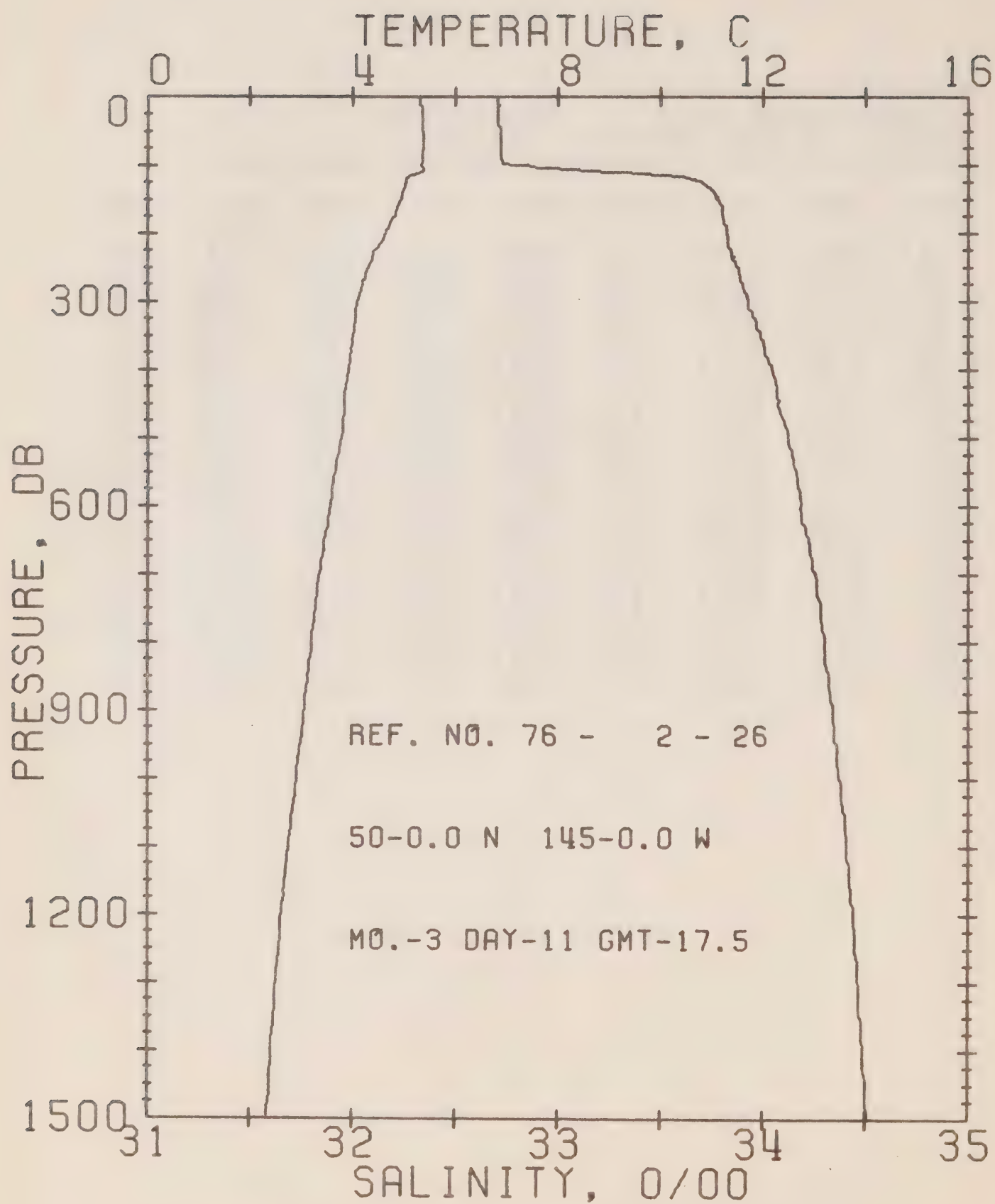
REFERENCE NO. 76- 2- 25

DATE 10/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.2

RESULTS OF STP CAST 466 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.32	32.71	0	25.85	215.8	0.0	0.0	1469.
10	5.32	32.71	10	25.85	216.1	0.22	0.01	1469.
20	5.33	32.71	20	25.85	216.3	0.43	0.04	1470.
30	5.32	32.71	30	25.85	216.3	0.65	0.10	1470.
50	5.33	32.71	50	25.85	216.6	1.08	0.28	1470.
75	5.23	32.70	75	25.85	216.5	1.62	0.62	1470.
100	5.18	32.75	99	25.90	212.4	2.16	1.10	1470.
125	5.03	33.65	124	26.63	143.6	2.58	1.58	1471.
150	4.89	33.77	149	26.74	133.3	2.92	2.06	1471.
175	4.73	33.79	174	26.77	130.3	3.25	2.60	1471.
200	4.52	33.82	199	26.82	126.0	3.57	3.21	1471.
225	4.38	33.84	223	26.85	123.3	3.88	3.89	1471.
250	4.27	33.86	248	26.88	120.8	4.19	4.62	1471.
300	4.09	33.91	298	26.93	115.7	4.78	6.28	1471.
400	3.93	34.02	397	27.04	106.6	5.89	10.23	1472.
500	3.73	34.13	496	27.15	97.0	6.90	14.87	1473.
600	3.53	34.20	595	27.22	90.5	7.83	20.10	1474.
800	3.20	34.30	793	27.33	81.0	9.55	32.29	1476.
1000	2.86	34.39	990	27.44	72.0	11.07	46.27	1478.
1200	2.62	34.44	1188	27.50	66.7	12.46	61.77	1480.





## OFFSHORE OCEANOGRAPHY GROUP

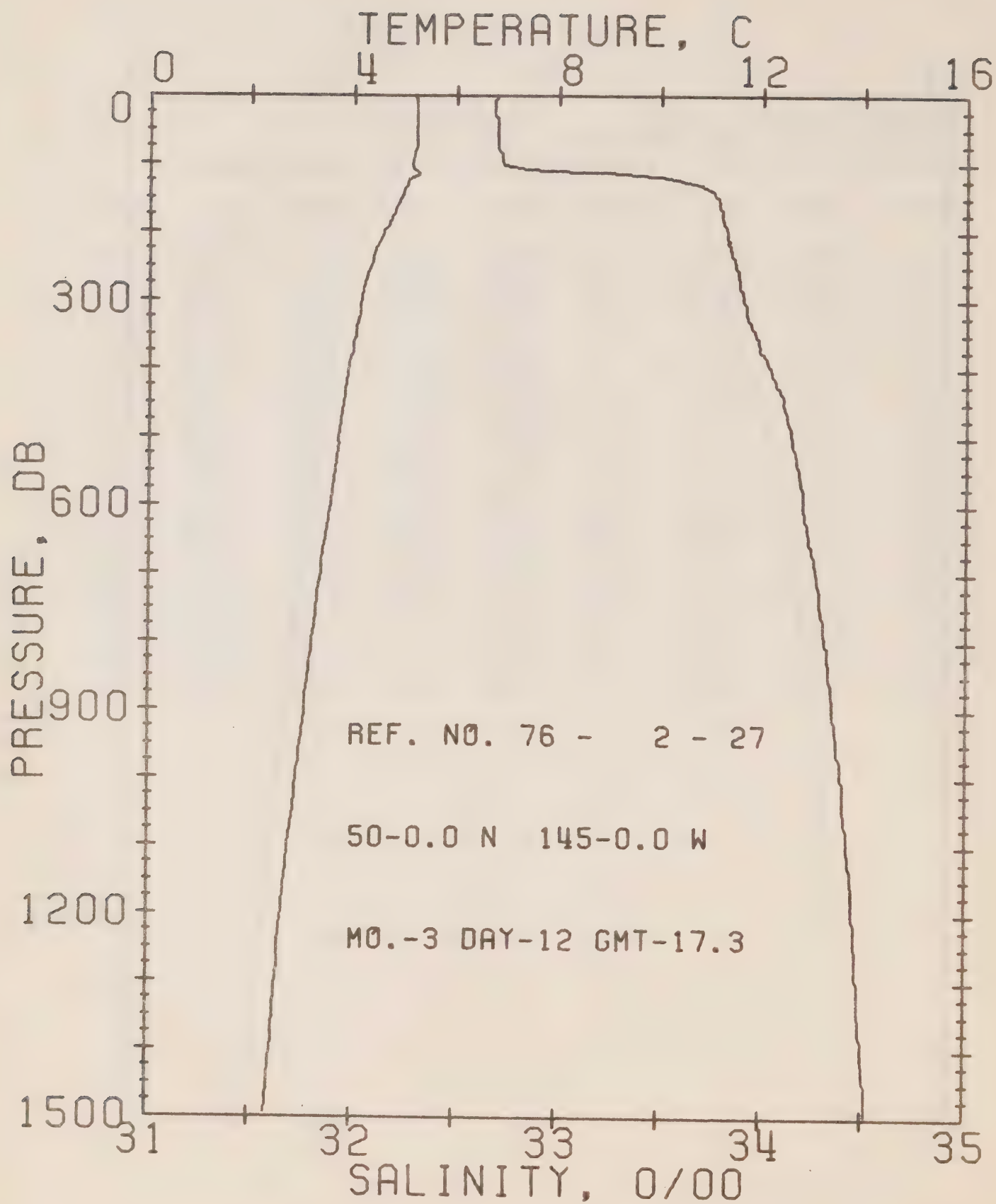
REFERENCE NO. 76- 2- 26

DATE 11/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.5

RESULTS OF STP CAST 475 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.31	32.71	0	25.85	215.7	0.0	0.0	1469.
10	5.32	32.71	10	25.85	216.1	0.22	0.01	1469.
20	5.36	32.71	20	25.85	216.7	0.43	0.04	1470.
30	5.37	32.71	30	25.85	216.9	0.65	0.10	1470.
50	5.37	32.72	50	25.85	216.3	1.08	0.28	1470.
75	5.39	32.72	75	25.85	216.8	1.62	0.62	1471.
100	5.34	32.79	99	25.91	211.2	2.16	1.10	1471.
125	5.03	33.70	124	26.67	139.8	2.59	1.58	1471.
150	4.93	33.78	149	26.74	133.0	2.93	2.06	1472.
175	4.81	33.80	174	26.77	130.4	3.26	2.60	1471.
200	4.62	33.82	199	26.81	127.1	3.58	3.22	1471.
225	4.41	33.84	223	26.85	123.6	3.89	3.90	1471.
250	4.29	33.88	248	26.89	119.9	4.20	4.64	1471.
300	4.09	33.93	298	26.95	114.1	4.78	6.28	1471.
400	3.92	34.04	397	27.06	105.0	5.88	10.17	1472.
500	3.78	34.12	496	27.13	98.2	6.89	14.33	1473.
600	3.56	34.19	595	27.21	91.9	7.84	20.13	1474.
800	3.20	34.30	793	27.33	81.0	9.56	32.36	1476.
1000	2.90	34.37	990	27.42	73.8	11.11	46.52	1478.
1200	2.60	34.44	1188	27.50	66.6	12.50	62.18	1480.



## OFFSHORE OCEANOGRAPHY GROUP

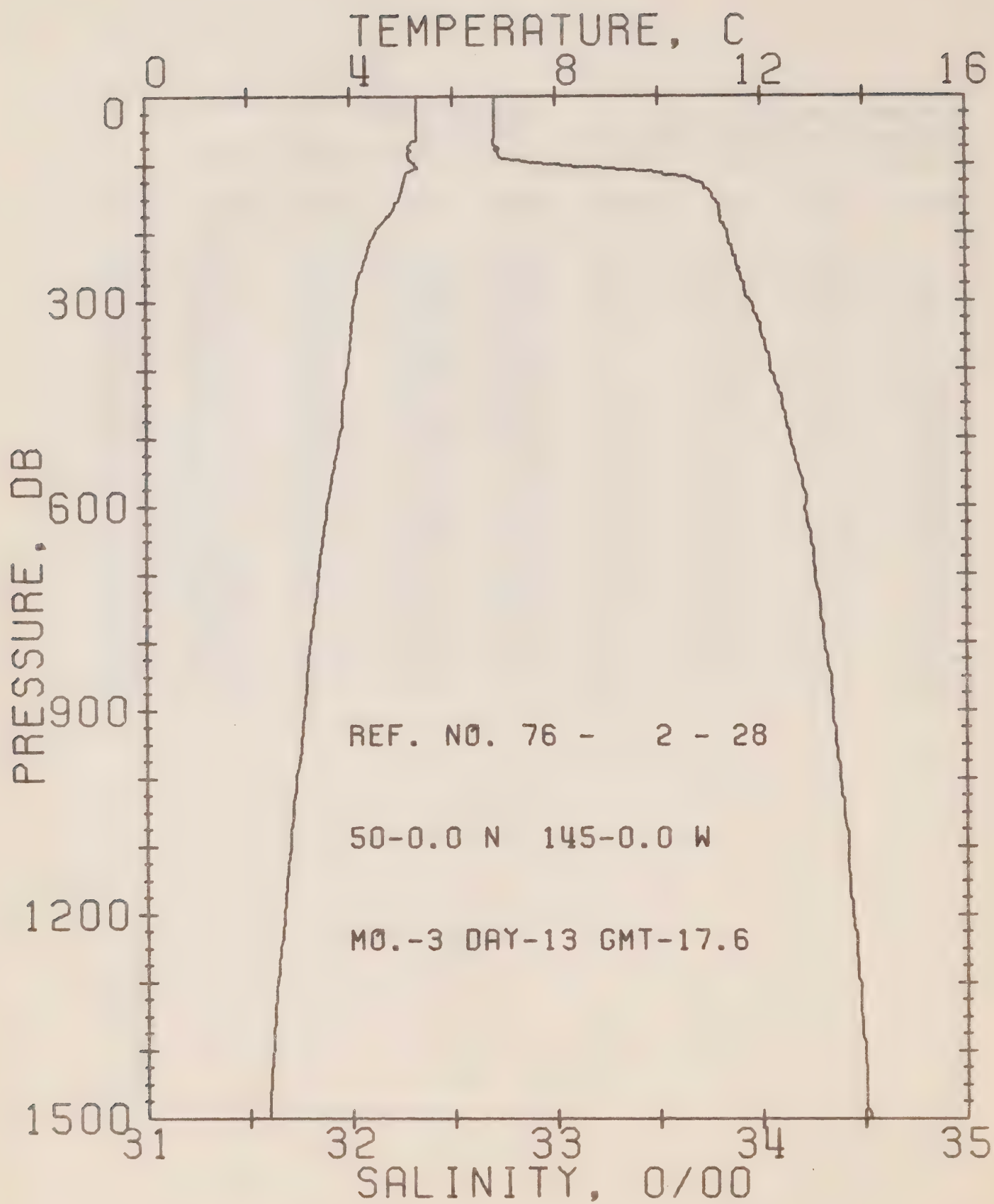
REFERENCE NO. 76- 2- 27

DATE 12/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 525 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.21	32.70	0	25.86	215.3	0.0	0.0	1469.
10	5.22	32.69	10	25.85	216.5	0.22	0.01	1469.
20	5.22	32.69	20	25.85	216.6	0.43	0.04	1469.
30	5.22	32.69	30	25.85	216.7	0.65	0.10	1469.
50	5.22	32.70	50	25.85	216.1	1.08	0.28	1470.
75	5.23	32.70	75	25.85	216.5	1.62	0.62	1470.
100	5.13	32.72	99	25.88	213.8	2.16	1.10	1470.
125	5.06	33.61	124	26.59	147.0	2.62	1.62	1471.
150	4.92	33.78	149	26.74	132.9	2.96	2.10	1472.
175	4.77	33.80	174	26.78	130.0	3.29	2.64	1471.
200	4.59	33.83	199	26.82	126.0	3.61	3.26	1471.
225	4.43	33.84	223	26.84	123.9	3.92	3.93	1471.
250	4.34	33.87	248	26.88	120.8	4.23	4.67	1471.
300	4.15	33.91	298	26.93	116.3	4.82	6.33	1471.
400	3.90	34.04	397	27.06	104.8	5.93	10.29	1472.
500	3.71	34.14	496	27.16	95.8	6.93	14.95	1473.
600	3.56	34.20	595	27.22	90.8	7.86	20.06	1474.
800	3.20	34.31	793	27.34	80.3	9.56	32.18	1476.
1000	2.90	34.39	990	27.43	72.3	11.09	46.14	1478.
1200	2.62	34.45	1188	27.50	66.0	12.46	61.57	1480.





## OFFSHORE OCEANOGRAPHY GROUP

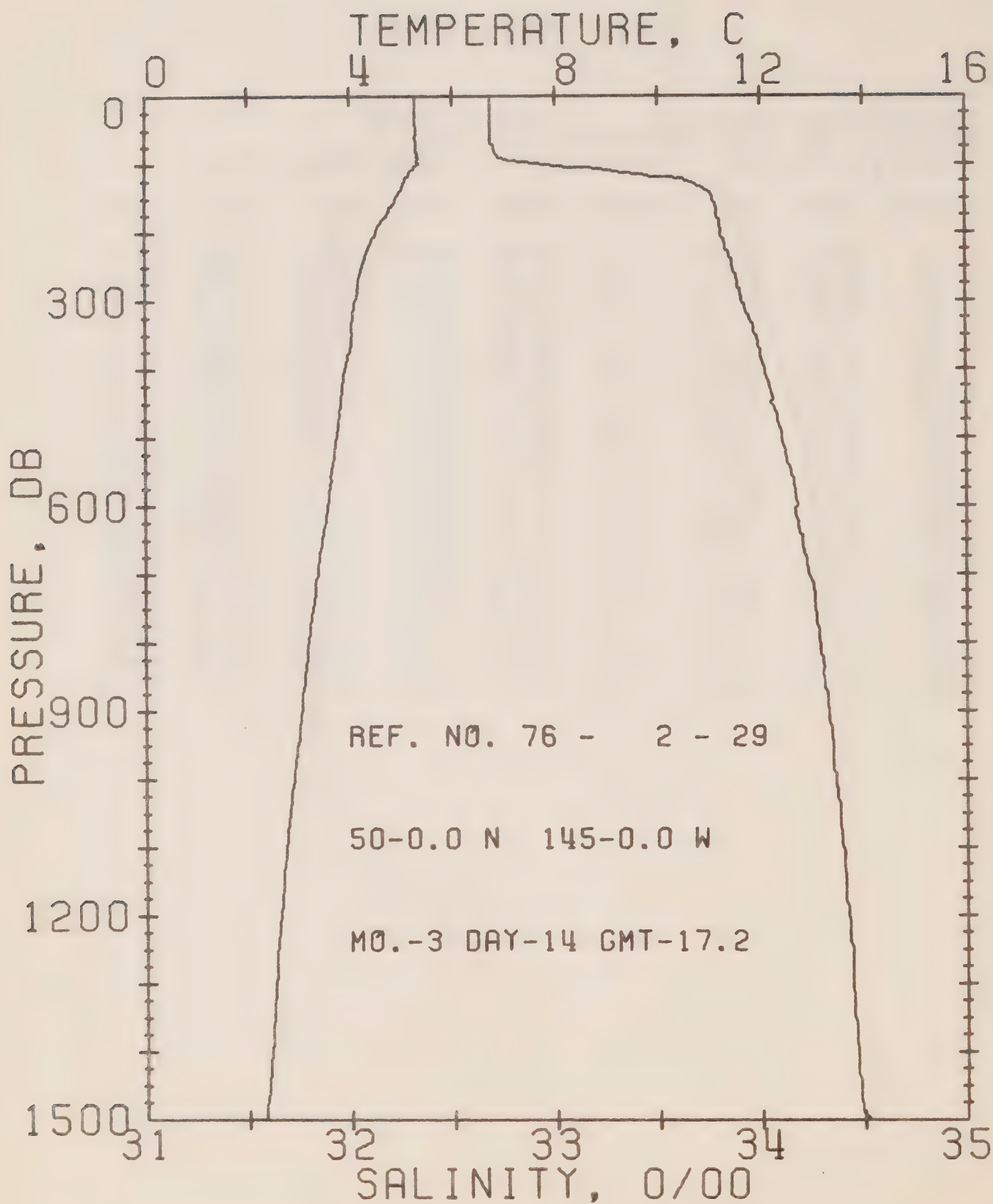
REFERENCE NO. 76- 2- 28

DATE 13/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.6

RESULTS OF STP CAST 498 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.30	32.72	0	25.86	214.8	0.0	0.0	1469.
10	5.31	32.71	10	25.85	216.0	0.22	0.01	1469.
20	5.30	32.71	20	25.85	216.0	0.43	0.04	1470.
30	5.31	32.71	30	25.85	216.2	0.65	0.10	1470.
50	5.31	32.71	50	25.85	216.4	1.08	0.28	1470.
75	5.15	32.73	75	25.89	213.4	1.62	0.62	1470.
100	5.29	32.97	99	26.06	197.2	2.15	1.09	1471.
125	5.06	33.69	124	26.66	140.9	2.55	1.55	1472.
150	4.96	33.77	149	26.73	134.1	2.90	2.03	1472.
175	4.76	33.80	174	26.78	129.9	3.22	2.57	1471.
200	4.50	33.84	199	26.84	124.3	3.54	3.18	1471.
225	4.35	33.86	223	26.87	121.5	3.95	3.84	1470.
250	4.24	33.89	248	26.90	118.3	4.15	4.57	1470.
300	4.07	33.95	298	26.97	112.4	4.73	6.19	1471.
400	3.93	34.05	397	27.06	104.3	5.81	10.03	1472.
500	3.77	34.14	496	27.15	96.7	6.81	14.62	1473.
600	3.53	34.22	595	27.24	89.1	7.73	19.79	1474.
800	3.19	34.31	793	27.34	80.2	9.43	31.87	1476.
1000	2.91	34.38	990	27.42	73.2	10.96	45.89	1478.
1200	2.67	34.44	1188	27.49	67.3	12.35	61.52	1480.



## OFFSHORE OCEANOGRAPHY GROUP

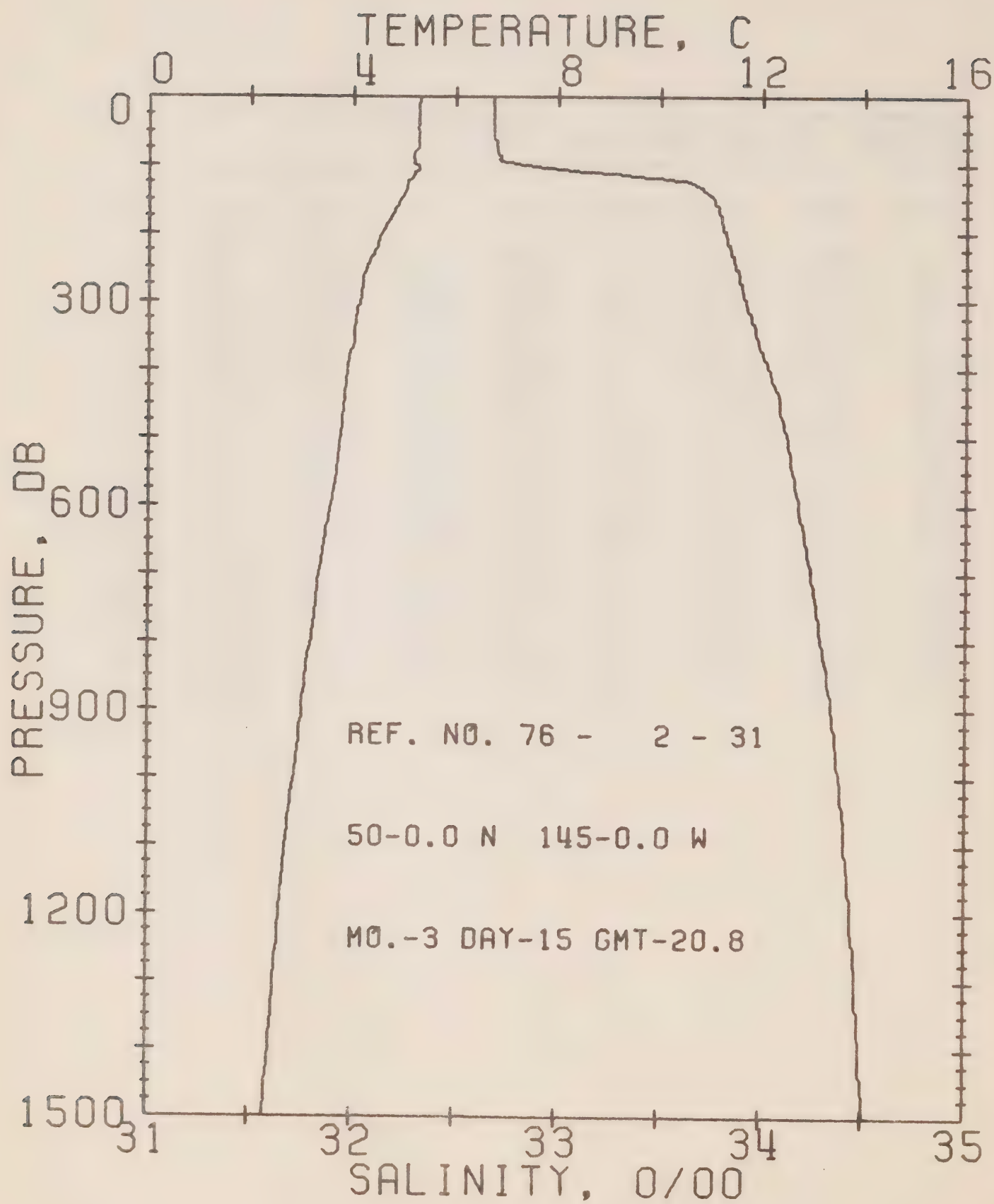
REFERENCE NO. 76- 2- 29

DATE 14/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.2

RESULTS OF STP CAST 512 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.28	32.69	0	25.84	216.9	0.0	0.0	1469.
10	5.28	32.69	10	25.84	217.2	0.22	0.01	1469.
20	5.28	32.69	20	25.84	217.3	0.43	0.04	1469.
30	5.28	32.69	30	25.84	217.4	0.65	0.10	1470.
50	5.30	32.69	50	25.84	217.8	1.09	0.28	1470.
75	5.30	32.70	75	25.85	217.3	1.63	0.62	1470.
100	5.35	32.97	99	26.05	197.8	2.17	1.10	1471.
125	5.05	33.67	124	26.64	142.4	2.59	1.58	1471.
150	4.90	33.77	149	26.74	133.4	2.93	2.06	1471.
175	4.71	33.79	174	26.77	130.2	3.26	2.60	1471.
200	4.51	33.81	199	26.81	126.6	3.58	3.22	1471.
225	4.34	33.83	223	26.85	123.6	3.89	3.39	1470.
250	4.23	33.86	248	26.88	120.5	4.20	4.63	1470.
300	4.09	33.91	298	26.94	115.7	4.78	6.28	1471.
400	3.90	34.02	397	27.04	106.3	5.89	10.22	1472.
500	3.73	34.10	496	27.12	99.3	6.92	14.92	1473.
600	3.54	34.18	595	27.21	92.1	7.87	20.27	1474.
800	3.17	34.28	793	27.32	92.0	9.61	32.65	1475.
1000	2.87	34.36	990	27.41	74.2	11.17	46.89	1478.
1200	2.61	34.42	1188	27.48	68.1	12.59	62.76	1480.





## OFFSHORE OCEANOGRAPHY GROUP

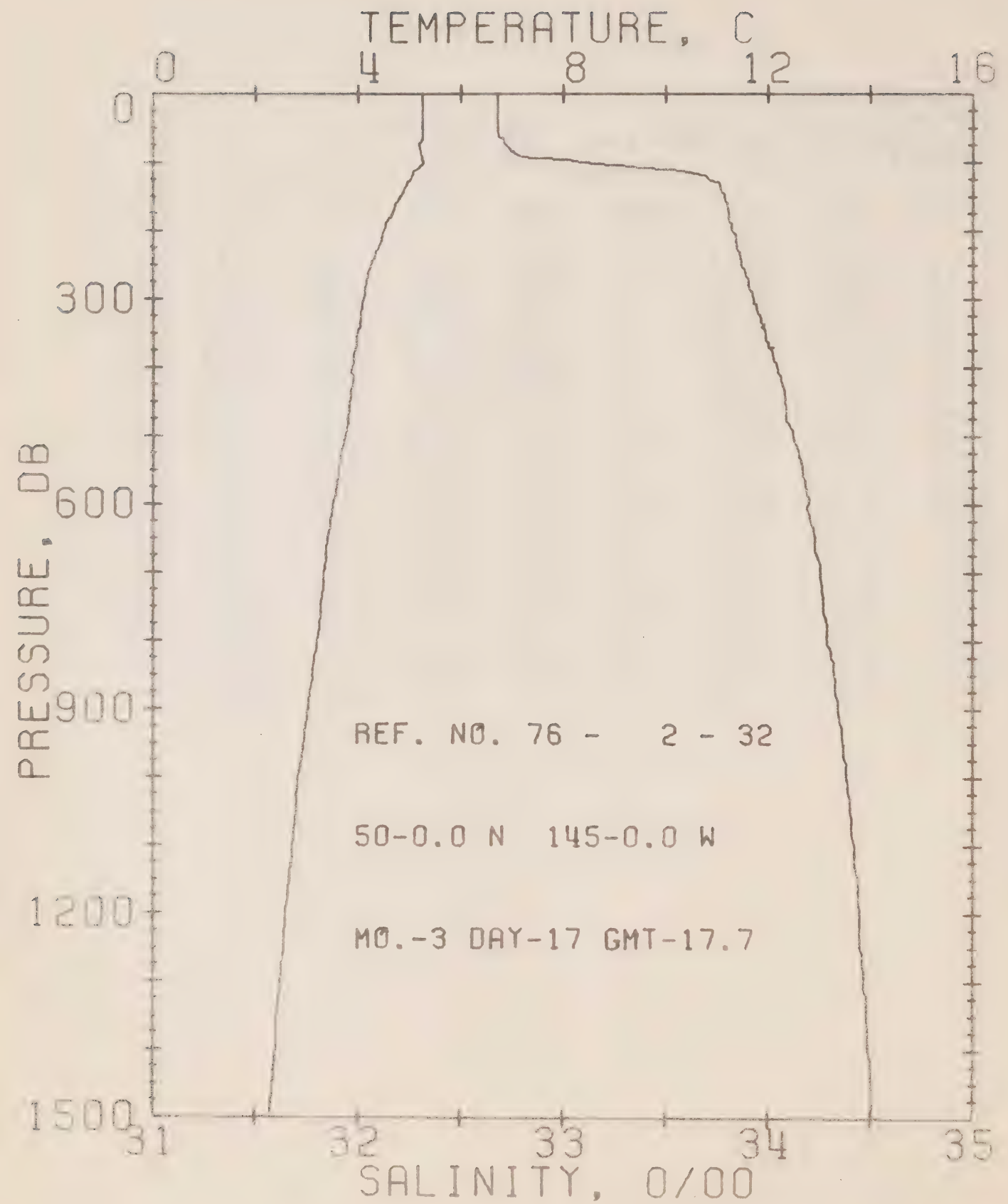
REFERENCE NO. 76- 2- 31

DATE 15/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 20.8

RESULTS OF STP CAST 492 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.29	32.69	0	25.84	217.0	0.0	0.0	1469.
10	5.29	32.69	10	25.84	217.3	0.22	0.01	1469.
20	5.27	32.69	20	25.84	217.1	0.43	0.04	1469.
30	5.27	32.69	30	25.84	217.2	0.65	0.10	1470.
50	5.27	32.69	50	25.84	217.4	1.09	0.28	1470.
75	5.27	32.70	75	25.85	216.9	1.63	0.62	1470.
100	5.22	32.82	99	25.95	207.7	2.17	1.10	1471.
125	5.06	33.65	124	26.62	144.0	2.61	1.60	1472.
150	4.93	33.76	149	26.73	134.5	2.95	2.09	1472.
175	4.76	33.80	174	26.78	129.9	3.28	2.63	1471.
200	4.55	33.82	199	26.82	126.4	3.60	3.25	1471.
225	4.43	33.85	223	26.85	123.1	3.92	3.92	1471.
250	4.27	33.87	248	26.88	120.1	4.22	4.66	1471.
300	4.14	33.92	298	26.94	115.4	4.81	6.30	1471.
400	3.89	34.03	397	27.05	105.1	5.91	10.23	1472.
500	3.75	34.12	496	27.14	97.7	6.92	14.87	1473.
600	3.56	34.18	595	27.20	92.3	7.87	20.20	1474.
800	3.18	34.29	793	27.33	81.5	9.60	32.51	1476.
1000	2.86	34.38	990	27.43	72.6	11.14	46.53	1478.
1200	2.59	34.44	1188	27.50	66.3	12.52	62.01	1480.



## OFFSHORE OCEANOGRAPHY GROUP

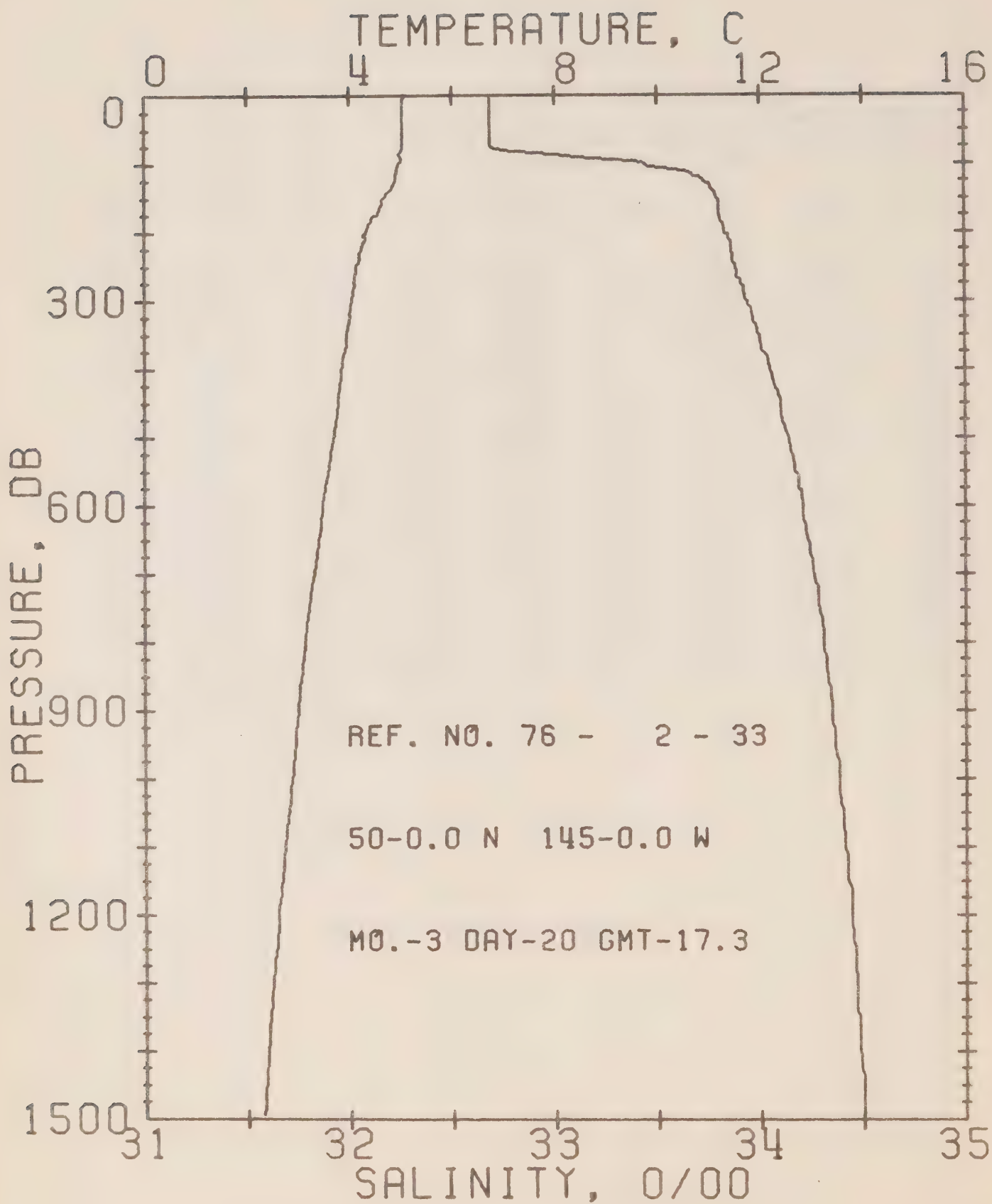
REFERENCE NO. 76- 2- 32

DATE 17/ 3/75

POSITION 50- 0.0N, 145- 0.0W GMT 17.7

RESULTS OF STP CAST 488 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.25	32.68	0	25.84	217.2	0.0	0.0	1469.
10	5.25	32.68	10	25.84	217.6	0.22	0.01	1469.
20	5.24	32.68	20	25.84	217.6	0.44	0.04	1469.
30	5.24	32.68	30	25.84	217.7	0.65	0.10	1469.
50	5.25	32.68	50	25.84	217.9	1.09	0.28	1470.
75	5.19	32.72	75	25.87	214.5	1.63	0.62	1470.
100	5.27	33.08	99	26.15	138.7	2.15	1.09	1471.
125	5.02	33.72	124	26.68	138.3	2.54	1.53	1471.
150	4.83	33.79	149	26.76	131.2	2.88	2.00	1471.
175	4.67	33.81	174	26.79	128.2	3.20	2.54	1471.
200	4.51	33.82	199	26.82	126.0	3.52	3.14	1471.
225	4.40	33.85	223	26.86	122.8	3.83	3.82	1471.
250	4.25	33.87	248	26.89	119.9	4.13	4.55	1470.
300	4.11	33.93	298	26.95	114.3	4.72	5.19	1471.
400	3.89	34.04	397	27.06	104.7	5.81	10.08	1472.
500	3.76	34.12	496	27.14	98.1	6.82	14.73	1473.
600	3.52	34.20	595	27.22	90.6	7.76	19.98	1474.
800	3.21	34.29	793	27.32	81.8	9.48	32.20	1476.
1000	2.84	34.38	990	27.43	72.4	11.01	46.21	1477.
1200	2.60	34.45	1188	27.51	65.7	12.39	61.65	1480.





## OFFSHORE OCEANOGRAPHY GROUP

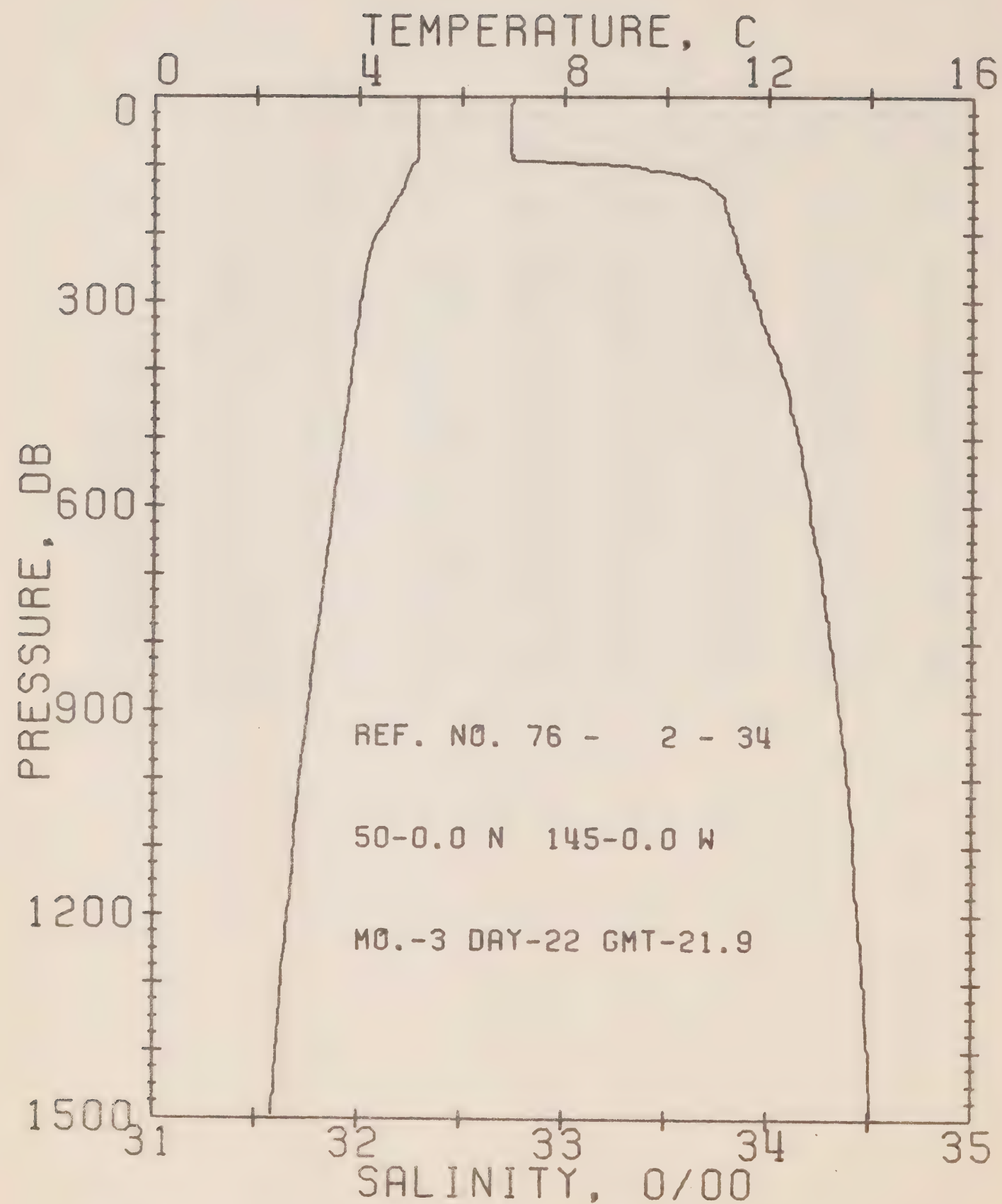
REFERENCE NO. 76- 2- 33

DATE 20/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 482 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.06	32.69	0	25.86	214.5	0.0	0.0	1468.
10	5.04	32.69	10	25.87	214.6	0.21	0.01	1469.
20	5.04	32.69	20	25.87	214.7	0.43	0.04	1468.
30	5.04	32.69	30	25.87	214.7	0.64	0.10	1469.
50	5.04	32.69	50	25.87	214.9	1.07	0.27	1469.
75	5.04	32.69	75	25.87	215.2	1.61	0.62	1469.
100	4.97	33.43	99	26.46	158.9	2.09	1.04	1470.
125	4.89	33.73	124	26.71	136.1	2.45	1.45	1471.
150	4.67	33.79	149	26.78	129.4	2.78	1.91	1470.
175	4.53	33.80	174	26.80	127.4	3.10	2.45	1470.
200	4.32	33.83	199	26.85	123.2	3.41	3.04	1470.
225	4.24	33.86	223	26.88	120.3	3.72	3.70	1470.
250	4.14	33.88	248	26.91	118.0	4.01	4.42	1470.
300	4.05	33.94	298	26.96	112.9	4.59	6.04	1471.
400	3.85	34.05	397	27.07	103.5	5.68	9.90	1471.
500	3.69	34.14	496	27.16	96.2	6.67	14.47	1473.
600	3.47	34.21	595	27.24	89.1	7.60	19.65	1473.
800	3.12	34.31	793	27.35	79.4	9.28	31.64	1475.
1000	2.85	34.38	990	27.43	72.5	10.80	45.53	1478.
1200	2.60	34.44	1188	27.50	66.5	12.19	61.05	1480.



## OFFSHORE OCEANOGRAPHY GROUP

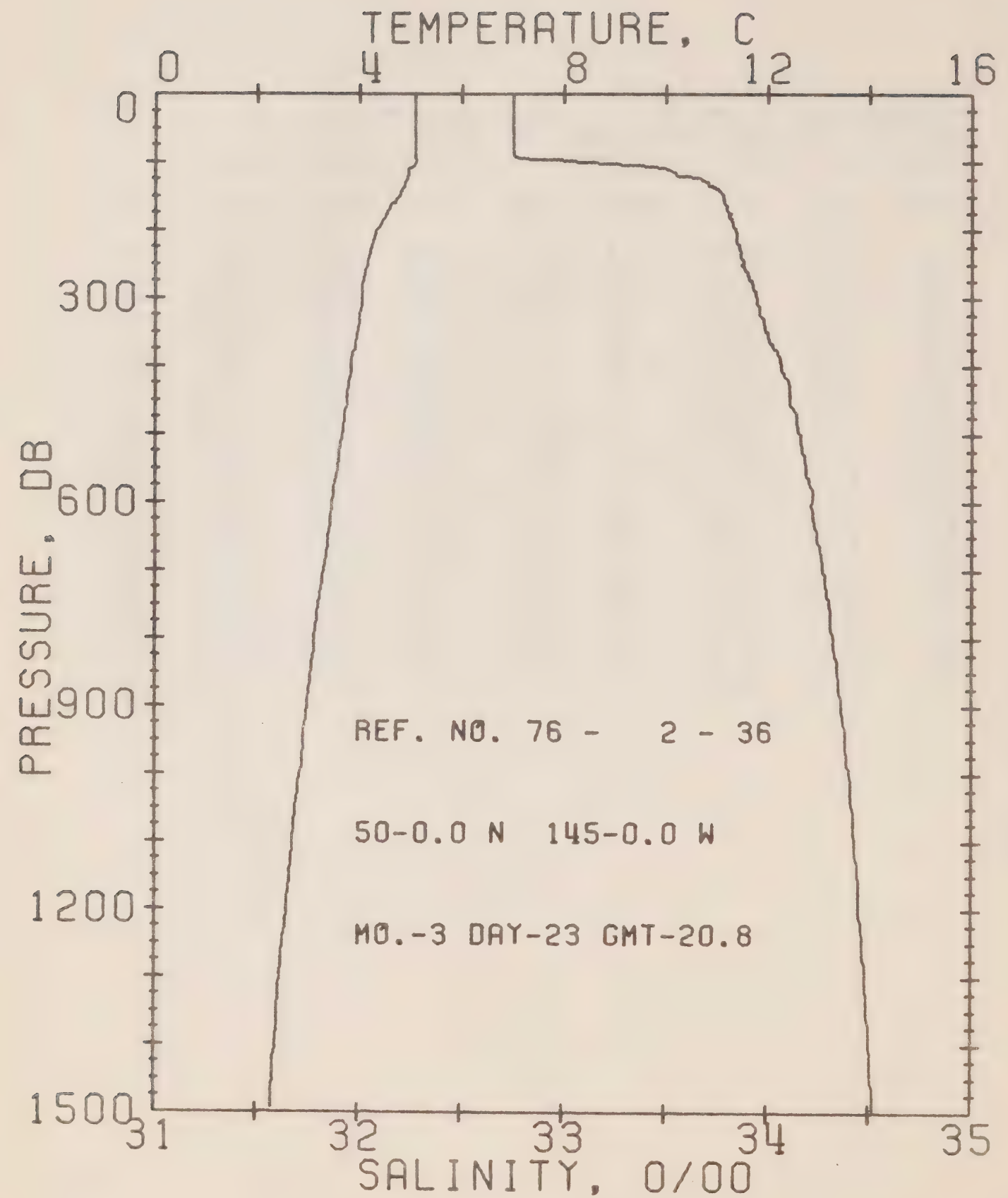
REFERENCE NO. 76- 2- 34

DATE 22/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 21.9

RESULTS OF STP CAST 501 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.14	32.75	0	25.90	210.8	0.0	0.0	1469.
10	5.14	32.74	10	25.90	211.9	0.21	0.01	1469.
20	5.14	32.74	20	25.90	212.0	0.42	0.04	1469.
30	5.14	32.74	30	25.90	212.1	0.64	0.10	1469.
50	5.14	32.74	50	25.90	212.3	1.06	0.27	1469.
75	5.14	32.74	75	25.90	212.6	1.59	0.61	1470.
100	5.02	33.25	99	26.31	173.2	2.11	1.07	1470.
125	4.89	33.70	124	26.68	138.3	2.49	1.50	1471.
150	4.72	33.79	149	26.77	130.0	2.83	1.99	1471.
175	4.55	33.80	174	26.80	127.6	3.15	2.51	1470.
200	4.33	33.83	199	26.85	123.3	3.46	3.11	1470.
225	4.20	33.85	223	26.88	120.7	3.77	3.77	1470.
250	4.13	33.88	248	26.91	117.9	4.07	4.49	1470.
300	4.01	33.94	298	26.97	112.6	4.64	6.10	1470.
400	3.84	34.06	397	27.08	102.6	5.72	9.93	1471.
500	3.68	34.15	496	27.17	95.0	6.70	14.45	1473.
600	3.50	34.21	595	27.23	89.4	7.62	19.61	1473.
800	3.16	34.31	793	27.34	79.7	9.32	31.66	1475.
1000	2.85	34.39	990	27.44	71.8	10.83	45.51	1478.
1200	2.62	34.44	1188	27.50	66.7	12.21	60.96	1480.





## OFFSHORE OCEANOGRAPHY GROUP

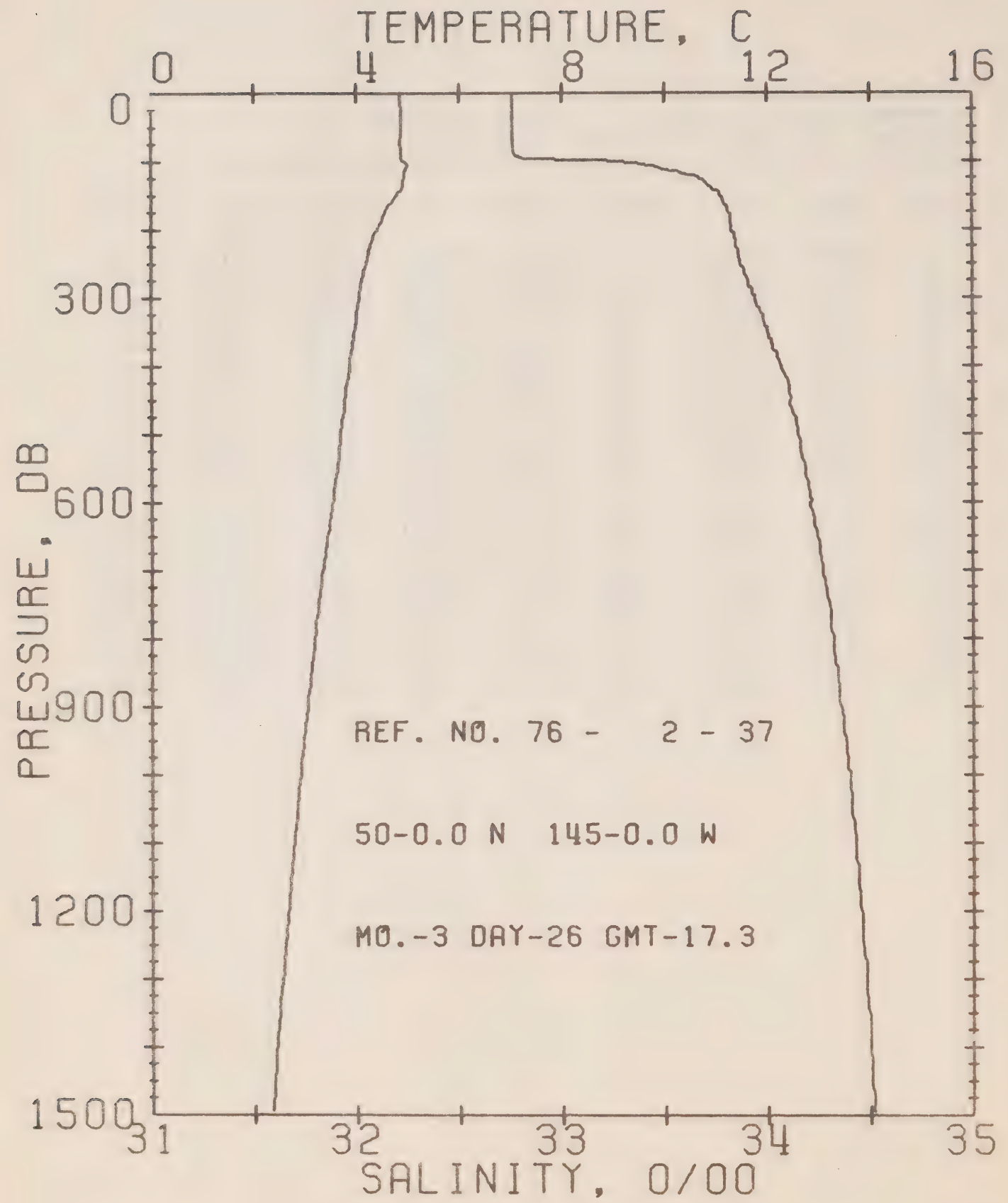
REFERENCE NO. 76- 2- 36

DATE 23/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 20.8

RESULTS OF STP CAST 503 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.10	32.75	0	25.91	210.5	0.0	0.0	1468.
10	5.10	32.75	10	25.91	210.8	0.21	0.01	1469.
20	5.10	32.75	20	25.91	210.9	0.42	0.04	1469.
30	5.10	32.75	30	25.91	210.9	0.63	0.10	1469.
50	5.10	32.75	50	25.91	211.1	1.05	0.27	1469.
75	5.10	32.75	75	25.91	211.4	1.58	0.61	1470.
100	5.10	33.09	99	26.18	186.1	2.10	1.07	1471.
125	4.92	33.68	124	26.66	140.1	2.49	1.51	1471.
150	4.79	33.78	149	26.76	131.5	2.83	1.99	1471.
175	4.53	33.82	174	26.82	125.9	3.15	2.52	1470.
200	4.33	33.84	199	26.85	122.6	3.46	3.12	1470.
225	4.23	33.86	223	26.88	120.2	3.77	3.77	1470.
250	4.15	33.88	248	26.91	118.1	4.07	4.49	1470.
300	4.04	33.95	298	26.97	112.1	4.64	6.10	1471.
400	3.83	34.07	397	27.09	101.8	5.72	9.93	1471.
500	3.66	34.16	496	27.18	94.1	6.70	14.42	1472.
600	3.47	34.22	595	27.24	88.5	7.61	19.52	1473.
800	3.12	34.32	793	27.36	78.6	9.28	31.41	1475.
1000	2.83	34.40	990	27.45	70.8	10.77	45.11	1477.
1200	2.58	34.45	1188	27.51	65.6	12.13	60.31	1480.



## OFFSHORE OCEANOGRAPHY GROUP

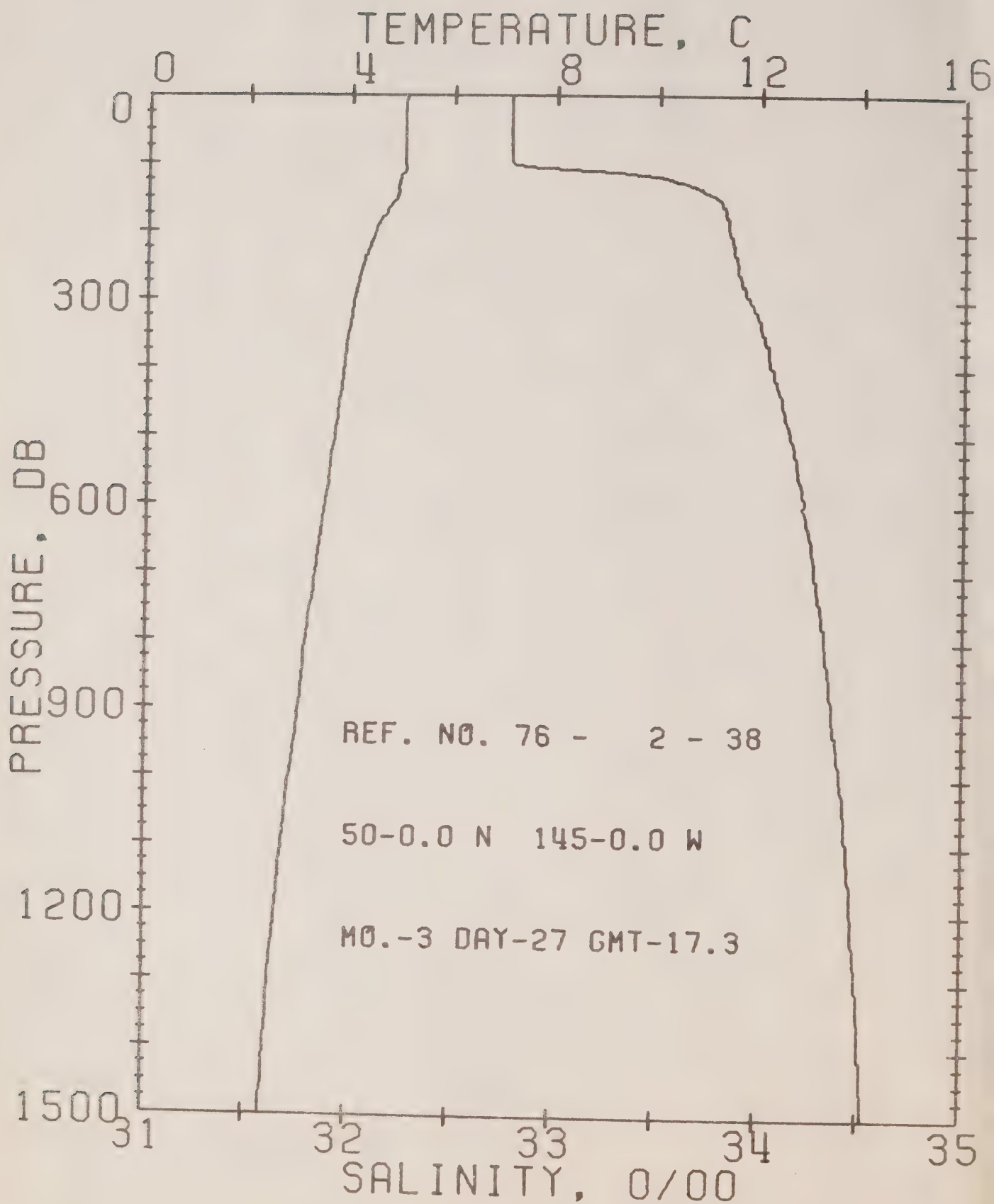
REFERENCE NO. 76- 2- 37

DATE 26/ 3/76

POSITION 50- 0.0N, 145- 0.0W GMT 17.3

RESULTS OF STP CAST 474 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	4.86	32.76	0	25.94	207.1	0.0	0.0	1467.
10	4.86	32.76	10	25.94	207.4	0.21	0.01	1468.
20	4.86	32.76	20	25.94	207.6	0.41	0.04	1468.
30	4.87	32.76	30	25.94	207.7	0.62	0.10	1468.
50	4.87	32.76	50	25.94	207.8	1.04	0.26	1468.
75	4.86	32.76	75	25.94	208.1	1.56	0.60	1469.
100	4.90	33.25	99	26.33	171.9	2.07	1.05	1470.
125	4.92	33.67	124	26.66	140.9	2.45	1.49	1471.
150	4.79	33.77	149	26.75	132.2	2.79	1.37	1471.
175	4.54	33.81	174	26.81	126.4	3.12	2.50	1470.
200	4.40	33.82	199	26.83	124.8	3.43	3.10	1470.
225	4.26	33.85	223	26.87	121.2	3.74	3.76	1470.
250	4.18	33.87	248	26.89	119.2	4.04	4.49	1470.
300	4.05	33.94	298	26.96	112.9	4.62	6.11	1471.
400	3.87	34.06	397	27.08	102.7	5.69	9.95	1472.
500	3.69	34.15	496	27.17	95.1	6.68	14.45	1473.
600	3.53	34.21	595	27.23	89.5	7.60	17.52	1474.
800	3.18	34.32	793	27.35	79.2	9.28	31.59	1476.
1000	2.90	34.40	990	27.44	71.5	10.79	45.42	1478.
1200	2.65	34.46	1188	27.51	65.9	12.17	60.83	1480.





## OFFSHORE OCEANOGRAPHY GROUP

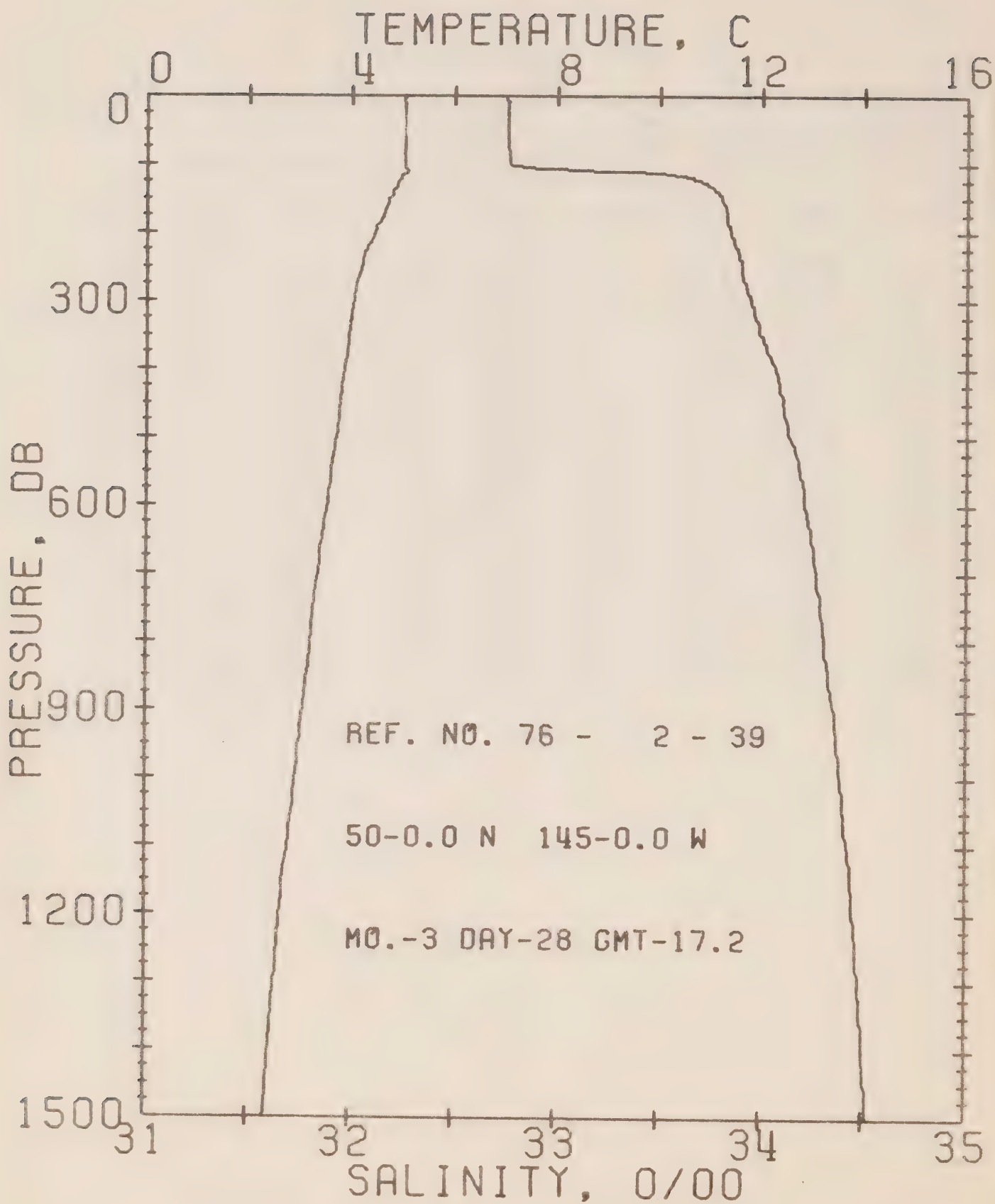
REFERENCE NO. 76- 2- 38

DATE 27/ 3/76

POSITION 50- 0.0N. 145- 0.0W GMT 17.3

RESULTS OF STP CAST 549 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.06	32.79	0	25.94	207.0	0.0	0.0	1468.
10	5.04	32.78	10	25.94	207.9	0.21	0.01	1468.
20	5.04	32.78	20	25.94	208.0	0.42	0.04	1469.
30	5.04	32.78	30	25.94	208.0	0.62	0.10	1469.
50	5.04	32.78	50	25.94	208.2	1.04	0.27	1469.
75	5.04	32.78	75	25.94	208.5	1.56	0.60	1469.
100	5.05	32.79	99	25.94	208.2	2.08	1.06	1470.
125	4.94	33.58	124	26.58	147.8	2.52	1.56	1471.
150	4.89	33.78	149	26.75	132.5	2.87	2.05	1471.
175	4.66	33.83	174	26.81	126.6	3.19	2.58	1471.
200	4.47	33.85	199	26.85	123.3	3.50	3.18	1471.
225	4.35	33.87	223	26.88	120.8	3.81	3.84	1470.
250	4.23	33.89	248	26.90	118.2	4.11	4.56	1470.
300	4.06	33.95	298	26.97	112.4	4.68	6.18	1471.
400	3.88	34.06	397	27.08	102.3	5.76	9.99	1472.
500	3.70	34.15	496	27.17	95.3	6.75	14.53	1473.
600	3.51	34.21	595	27.23	89.3	7.66	19.67	1474.
800	3.16	34.32	793	27.35	79.0	9.34	31.59	1475.
1000	2.85	34.40	990	27.44	71.1	10.84	45.34	1478.
1200	2.59	34.46	1188	27.52	64.8	12.19	60.44	1480.



## OFFSHORE OCEANOGRAPHY GROUP

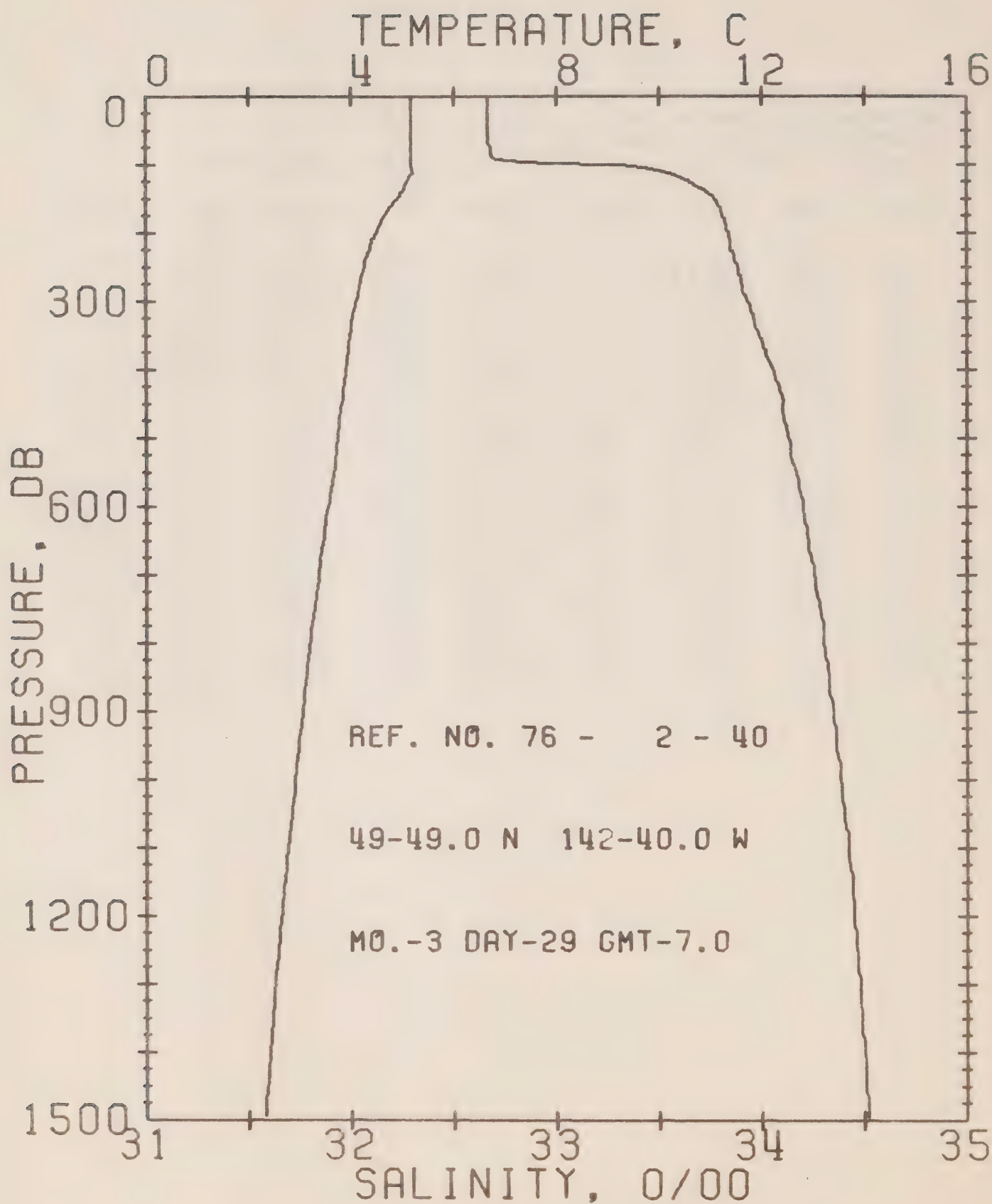
REFERENCE NO. 76- 2- 39

DATE 28/ 3/76

POSITION 50- 0.0N. 145- 0.0W GMT 17.2

RESULTS OF STP CAST 493 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.03	32.76	0	25.92	208.9	0.0	0.0	1468.
10	5.03	32.77	10	25.93	208.5	0.21	0.01	1468.
20	5.04	32.76	20	25.92	209.4	0.42	0.04	1469.
30	5.04	32.76	30	25.92	209.5	0.63	0.10	1469.
50	5.03	32.76	50	25.92	209.6	1.05	0.27	1469.
75	5.03	32.76	75	25.92	209.8	1.57	0.60	1469.
100	5.03	32.77	99	25.93	209.3	2.09	1.07	1470.
125	4.91	33.71	124	26.69	137.8	2.52	1.55	1471.
150	4.76	33.80	149	26.78	129.7	2.85	2.01	1471.
175	4.62	33.83	174	26.82	126.1	3.17	2.54	1471.
200	4.45	33.85	199	26.85	123.0	3.48	3.13	1470.
225	4.29	33.88	223	26.89	119.4	3.78	3.79	1470.
250	4.20	33.90	248	26.92	117.1	4.08	4.50	1470.
300	4.05	33.95	298	26.97	112.2	4.65	6.11	1471.
400	3.86	34.07	397	27.09	102.1	5.73	9.95	1472.
500	3.71	34.14	496	27.15	96.4	6.72	14.49	1473.
600	3.53	34.21	595	27.23	89.7	7.64	19.65	1474.
800	3.20	34.31	793	27.34	80.2	9.33	31.67	1476.
1000	2.92	34.39	990	27.43	72.6	10.86	45.67	1478.
1200	2.62	34.45	1188	27.50	66.0	12.24	61.14	1480.





## OFFSHORE OCEANOGRAPHY GROUP

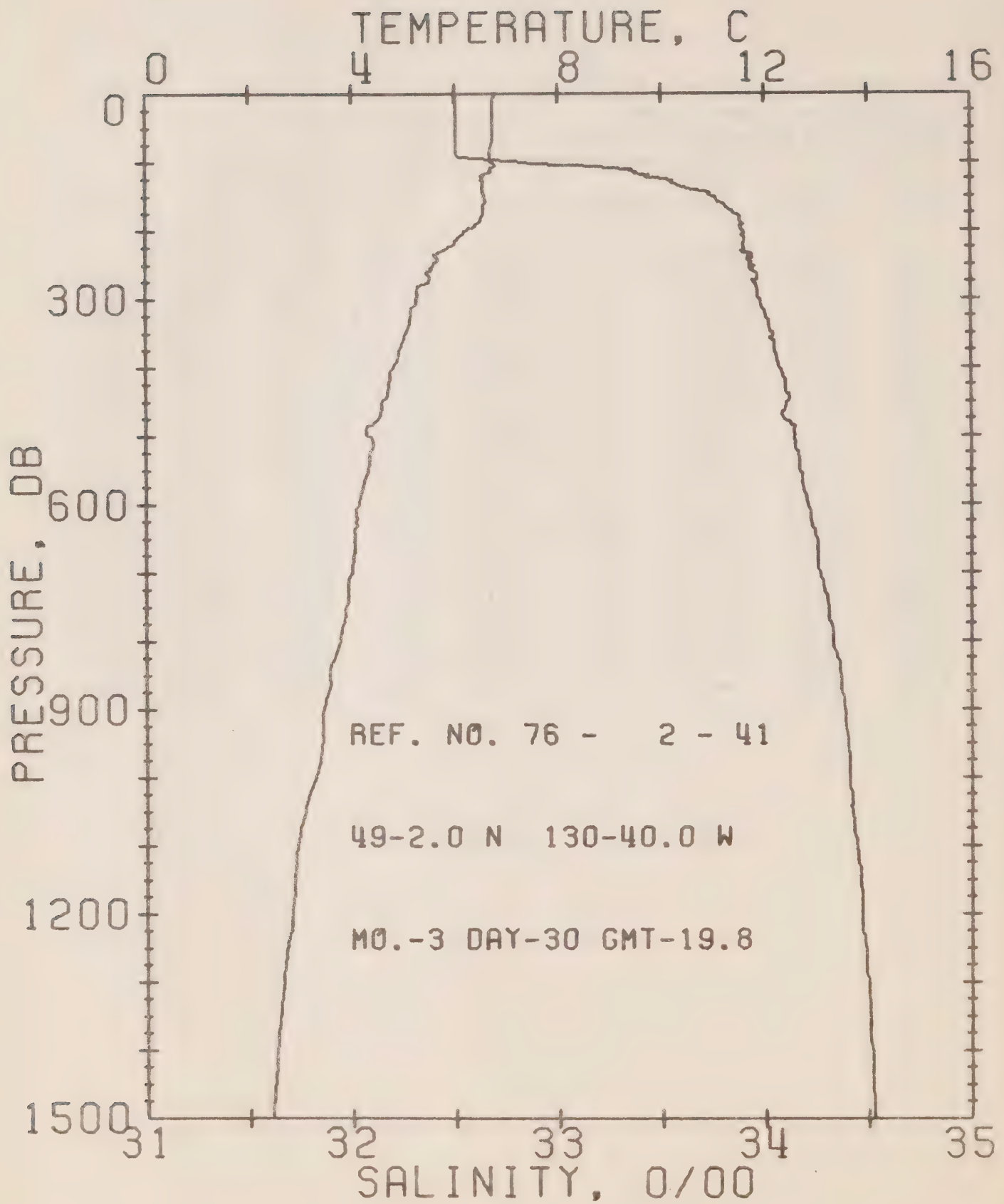
REFERENCE NO. 76- 2- 40

DATE 29/ 3/76

POSITION 49-49.0N. 142-40.0W GMT 7.0

RESULTS OF STP CAST 424 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	5.17	32.67	0	25.84	217.2	0.0	0.0	1469.
10	5.17	32.67	10	25.84	217.5	0.22	0.01	1469.
20	5.17	32.67	20	25.84	217.6	0.43	0.04	1469.
30	5.18	32.67	30	25.84	217.7	0.65	0.10	1469.
50	5.18	32.67	50	25.84	217.9	1.09	0.28	1469.
75	5.17	32.68	75	25.84	217.4	1.63	0.62	1470.
100	5.18	33.19	99	26.25	179.4	2.17	1.10	1471.
125	5.09	33.65	124	26.62	144.3	2.55	1.54	1472.
150	4.91	33.77	149	26.74	133.5	2.90	2.03	1471.
175	4.64	33.81	174	26.80	127.8	3.22	2.56	1471.
200	4.48	33.84	199	26.84	124.1	3.54	3.17	1471.
225	4.35	33.85	223	26.86	122.2	3.85	3.33	1470.
250	4.26	33.88	248	26.89	119.2	4.15	4.56	1471.
300	4.09	33.93	298	26.95	114.2	4.73	6.19	1471.
400	3.90	34.05	397	27.07	103.7	5.82	10.07	1472.
500	3.73	34.13	496	27.15	97.0	6.82	14.64	1473.
600	3.54	34.20	595	27.22	90.6	7.76	19.91	1474.
800	3.13	34.30	793	27.33	80.7	9.46	32.05	1476.
1000	2.89	34.38	990	27.43	72.9	10.99	46.05	1478.
1200	2.62	34.45	1188	27.50	66.0	12.38	61.53	1480.



## OFFSHORE OCEANOGRAPHY GROUP

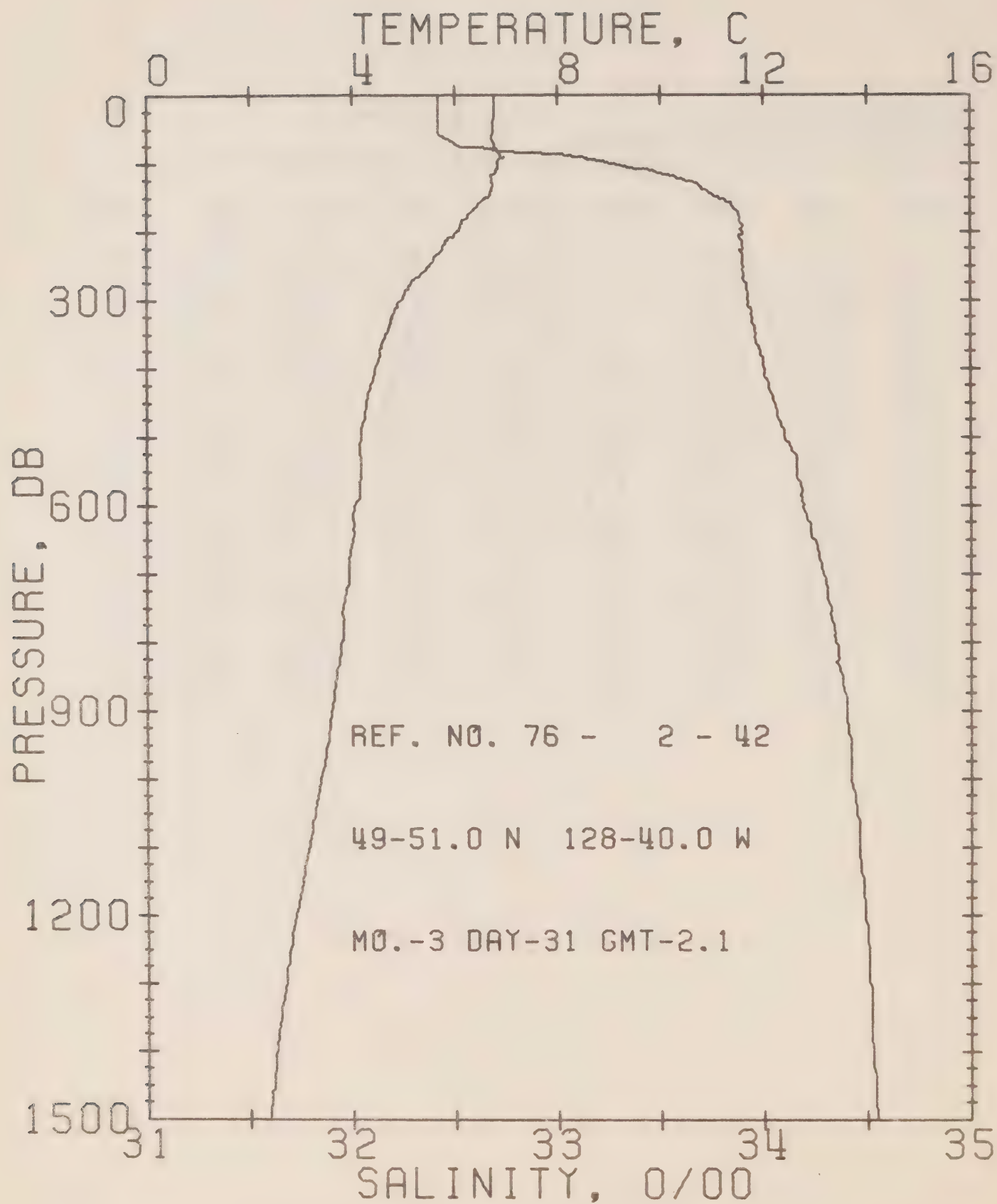
REFERENCE NO. 75- 2- 41

DATE 30/ 3/76

POSITION 49- 2.0N, 130-40.0W GMT 19.8

RESULTS OF STP CAST 498 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.79	32.50	0	25.50	248.7	0.0	0.0	1475.
10	6.76	32.51	10	25.52	248.0	0.25	0.01	1475.
20	6.76	32.51	20	25.52	248.1	0.50	0.05	1475.
30	6.76	32.51	30	25.52	248.2	0.74	0.11	1475.
50	6.76	32.51	50	25.52	248.5	1.24	0.32	1476.
75	6.71	32.51	75	25.52	243.1	1.86	0.71	1476.
100	6.73	32.82	99	25.76	225.6	2.47	1.26	1477.
125	6.53	33.56	124	26.37	168.2	2.95	1.80	1477.
150	6.60	33.75	149	26.51	155.2	3.36	2.37	1473.
175	6.55	33.87	174	26.61	146.0	3.74	3.00	1479.
200	6.21	33.90	199	26.68	139.8	4.10	3.58	1473.
225	5.85	33.90	223	26.73	135.6	4.44	4.43	1477.
250	5.58	33.93	248	26.78	130.5	4.77	5.23	1476.
300	5.25	33.97	298	26.86	123.7	5.40	7.00	1476.
400	4.80	34.07	397	26.99	112.5	6.58	11.19	1475.
500	4.33	34.15	496	27.10	102.1	7.66	16.12	1475.
600	4.12	34.21	595	27.17	96.2	8.66	21.75	1476.
800	3.74	34.33	793	27.30	84.7	10.48	34.66	1478.
1000	3.27	34.41	990	27.41	74.9	12.05	49.07	1479.
1200	2.80	34.47	1188	27.50	66.5	13.45	64.69	1481.





## OFFSHORE OCEANOGRAPHY GROUP

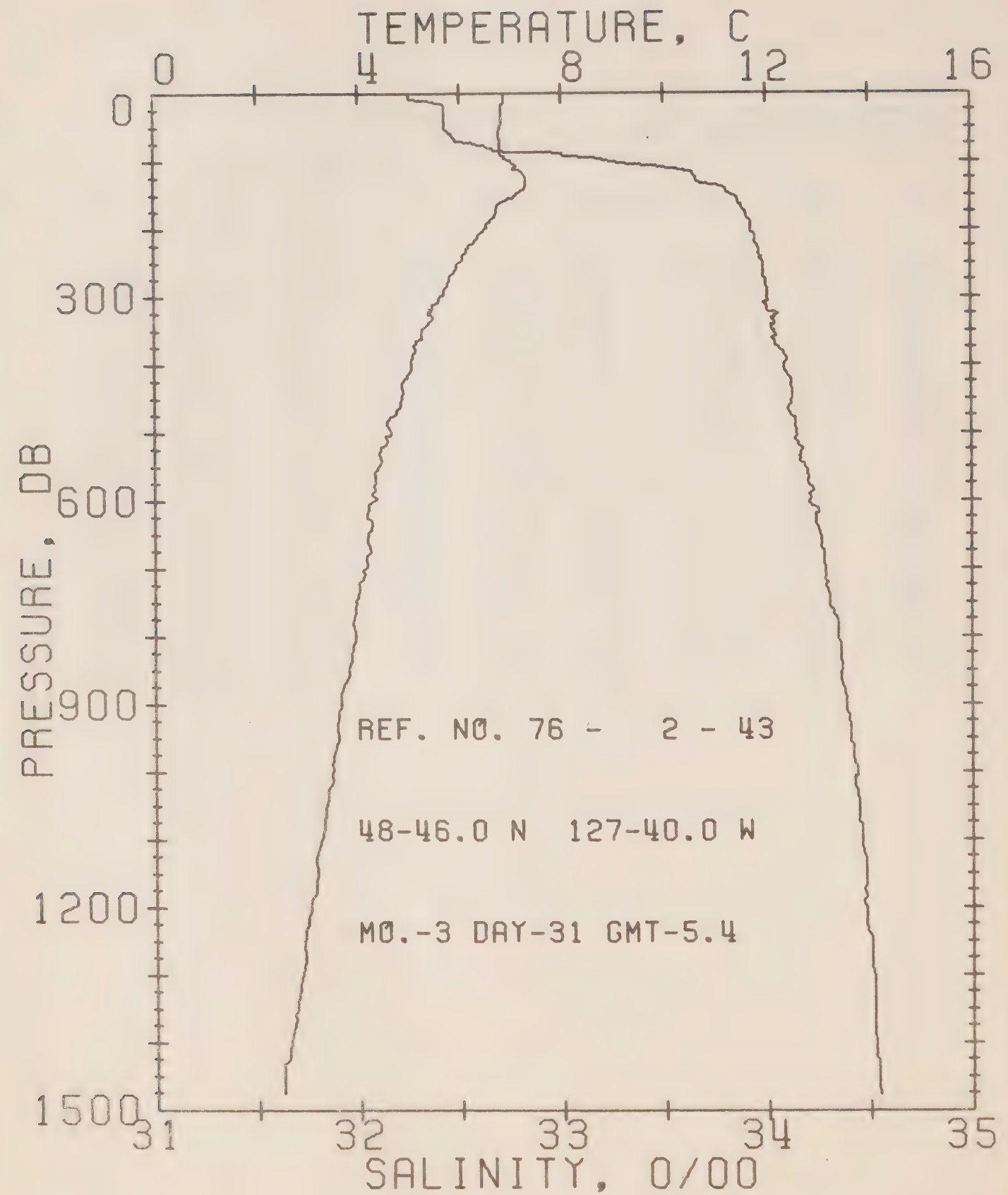
REFERENCE NO. 76- 2- 42

DATE 31/ 3/76

POSITION 49-51.0N, 128-40.0W GMT 2.1

RESULTS OF STP CAST 498 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.77	32.42	0	25.44	254.4	0.0	0.0	1475.
10	6.77	32.42	10	25.44	254.8	0.25	0.01	1475.
20	6.77	32.42	20	25.44	254.9	0.51	0.05	1475.
30	6.77	32.42	30	25.44	255.0	0.76	0.12	1475.
50	6.74	32.42	50	25.45	254.9	1.27	0.32	1475.
75	6.78	32.53	75	25.53	247.5	1.90	0.73	1476.
100	6.83	33.26	99	26.10	194.0	2.45	1.21	1478.
125	6.72	33.63	124	26.40	165.4	2.89	1.72	1478.
150	6.64	33.79	149	26.54	152.7	3.29	2.28	1478.
175	6.28	33.88	174	26.66	141.8	3.66	2.88	1478.
200	6.02	33.90	199	26.71	137.4	4.01	3.54	1477.
225	5.74	33.90	223	26.74	134.3	4.35	4.28	1476.
250	5.48	33.90	248	26.77	131.5	4.68	5.08	1476.
300	4.94	33.92	298	26.86	123.8	5.31	6.86	1474.
400	4.43	34.01	397	26.98	113.0	6.49	11.07	1474.
500	4.17	34.10	496	27.08	103.8	7.58	16.02	1475.
600	4.02	34.19	595	27.17	96.2	8.57	21.59	1476.
800	3.78	34.35	793	27.32	83.6	10.36	34.29	1478.
1000	3.36	34.42	990	27.41	75.3	11.93	48.71	1480.
1200	2.88	34.49	1188	27.51	65.9	13.33	64.40	1481.



## OFFSHORE OCEANOGRAPHY GROUP

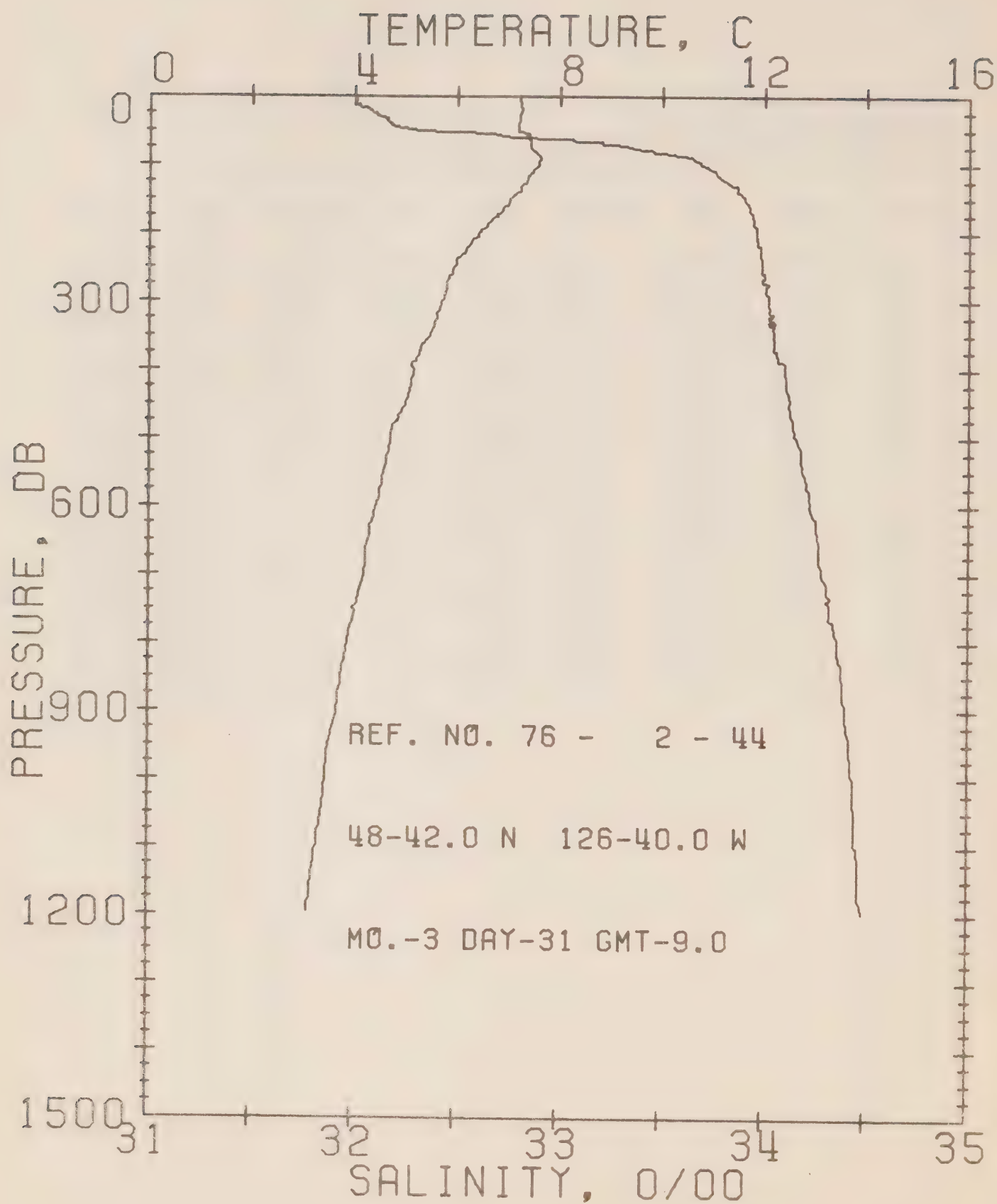
REFERENCE NO. 76- 2- 43

DATE 31/ 3/76

POSITION 48-46.0N, 127-40.0W GMT 5.4

RESULTS OF STP CAST 567 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	6.87	32.25	0	25.30	268.4	0.0	0.0	1475.
10	6.87	32.32	10	25.35	263.6	0.27	0.01	1475.
20	6.83	32.43	20	25.44	255.0	0.53	0.05	1475.
30	6.84	32.43	30	25.44	255.2	0.78	0.12	1476.
50	6.79	32.43	50	25.45	254.8	1.29	0.33	1476.
75	6.80	32.58	75	25.57	243.7	1.92	0.73	1476.
100	7.02	33.23	99	26.05	193.8	2.47	1.22	1478.
125	7.30	33.66	124	26.35	170.8	2.92	1.73	1480.
150	7.11	33.85	149	26.52	154.5	3.33	2.30	1480.
175	6.73	33.90	174	26.61	146.1	3.70	2.92	1479.
200	6.50	33.93	199	26.67	141.2	4.06	3.60	1479.
225	6.18	33.96	223	26.73	135.3	4.41	4.35	1478.
250	5.97	33.99	248	26.78	130.7	4.74	5.16	1478.
300	5.61	34.01	298	26.84	125.5	5.38	6.95	1477.
400	5.04	34.09	397	26.97	113.8	6.57	11.20	1476.
500	4.63	34.15	496	27.07	105.6	7.67	16.20	1477.
600	4.30	34.21	595	27.15	97.9	8.67	21.33	1477.
800	3.91	34.35	793	27.30	85.1	10.49	34.75	1479.
1000	3.44	34.44	990	27.42	74.6	12.09	49.39	1480.
1200	3.02	34.48	1188	27.49	68.4	13.52	65.39	1482.





## OFFSHORE OCEANOGRAPHY GROUP

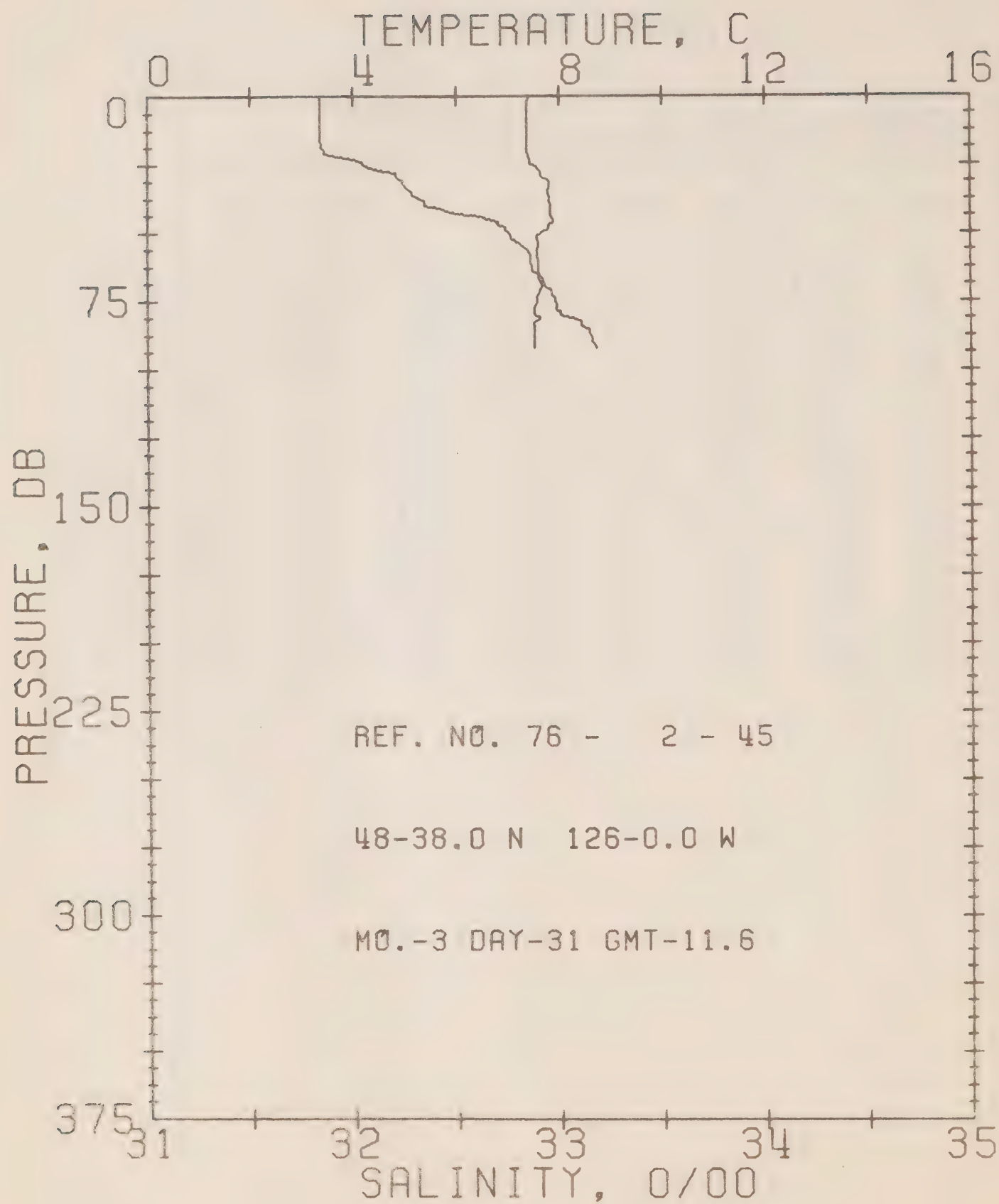
REFERENCE NO. 76- 2- 44

DATE 31/ 3/76

POSITION 48-42.0N, 126-40.0W GMT 9.0

RESULTS OF STP CAST 400 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.22	32.01	0	25.06	290.8	0.0	0.0	1476.
10	7.24	32.00	10	25.05	292.1	0.29	0.01	1476.
20	7.26	32.08	20	25.11	286.6	0.58	0.06	1477.
30	7.23	32.13	30	25.16	282.5	0.87	0.13	1477.
50	7.20	32.31	50	25.30	269.0	1.42	0.36	1477.
75	7.46	33.37	75	26.10	193.8	1.98	0.71	1480.
100	7.60	33.70	99	26.34	171.6	2.44	1.11	1481.
125	7.37	33.82	124	26.46	159.9	2.85	1.59	1481.
150	7.06	33.90	149	26.57	150.1	3.23	2.13	1480.
175	6.80	33.94	174	26.64	144.0	3.60	2.73	1480.
200	6.45	33.96	199	26.70	138.4	3.95	3.41	1479.
225	6.19	33.98	223	26.75	133.9	4.29	4.15	1478.
250	5.95	33.99	248	26.79	130.5	4.62	4.94	1478.
300	5.72	34.02	298	26.84	126.0	5.26	6.74	1478.
400	5.18	34.10	397	26.97	114.7	6.47	11.05	1477.
500	4.73	34.15	496	27.06	106.4	7.58	16.13	1477.
600	4.44	34.22	595	27.15	98.9	8.61	21.86	1477.
800	3.89	34.36	793	27.31	84.1	10.44	34.88	1479.
1000	3.46	34.44	990	27.42	75.1	12.03	49.42	1480.



## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 2- 45

DATE 31/ 3/76

POSITION 48-38.0N, 126- 0.0W GMT 11.6

RESULTS OF STP CAST 78 POINTS TAKEN FROM ANALOG TRACE

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
0	7.41	31.84	0	24.90	306.0	0.0	0.0	1477.
10	7.40	31.84	10	24.90	306.1	0.31	0.02	1477.
20	7.40	31.86	20	24.92	304.8	0.61	0.06	1477.
30	7.70	32.22	30	25.16	282.1	0.90	0.14	1479.
50	7.65	32.75	50	25.58	242.2	1.44	0.35	1479.
75	7.56	32.98	75	25.78	224.2	2.02	0.72	1480.

DEPTH	TEMP	SAL	DEPTH	TEMP	SAL
0.	7.41	31.84	47.	7.81	32.70
2.	7.39	31.84	48.	7.78	32.74
4.	7.39	31.84	49.	7.76	32.74
5.	7.39	31.84	50.	7.65	32.75
6.	7.39	31.84	51.	7.58	32.76
8.	7.39	31.84	52.	7.58	32.77
9.	7.39	31.84	53.	7.59	32.79
10.	7.40	31.84	54.	7.59	32.81
11.	7.40	31.84	56.	7.58	32.84
13.	7.40	31.84	59.	7.58	32.86
14.	7.40	31.84	60.	7.59	32.86
15.	7.40	31.84	61.	7.59	32.86
16.	7.40	31.84	63.	7.59	32.87
17.	7.40	31.84	64.	7.59	32.87
18.	7.40	31.85	65.	7.60	32.90
19.	7.40	31.85	66.	7.60	32.91
20.	7.40	31.86	67.	7.62	32.92
21.	7.41	31.86	68.	7.65	32.92
23.	7.43	32.00	69.	7.67	32.93
24.	7.45	32.04	70.	7.66	32.94
25.	7.46	32.05	71.	7.62	32.96
26.	7.58	32.08	72.	7.59	32.96
27.	7.63	32.13	73.	7.57	32.97
28.	7.65	32.21	74.	7.57	32.99
29.	7.66	32.21	75.	7.56	32.98
30.	7.70	32.22	77.	7.52	32.99
31.	7.80	32.24	78.	7.52	32.99
32.	7.80	32.24	79.	7.51	33.01
35.	7.79	32.26	80.	7.55	33.01
36.	7.80	32.29	81.	7.63	33.06
38.	7.82	32.34	82.	7.58	33.10
39.	7.83	32.35	83.	7.53	33.11
40.	7.83	32.35	84.	7.51	33.11
41.	7.83	32.43	85.	7.51	33.14
42.	7.84	32.45	86.	7.52	33.18
43.	7.85	32.51	87.	7.52	33.18
44.	7.87	32.63	89.	7.53	33.16
45.	7.89	32.65	90.	7.53	33.16
46.	7.89	32.71	92.	7.53	33.18





Surface Salinity and Temperature Observations  
(P-76-2)

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS  
CRUISE REFERENCE NUMBER 76- 2

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	O/CO	C	WEST
76	2	14	120	30.604	7.3	125-33
76	2	14	120	30.674	7.3	125-33
76	2	14	300	30.566b	7.4	126- 0
76	2	14	455	32.235b	7.3	126-40
76	2	14	745	32.094b	7.4	127-40
76	2	14	1100	32.411b	7.5	128-40
76	2	14	1720	32.470	7.2	130-40
76	2	15	15	32.481	6.7	132-40
76	2	15	400	32.536b		133-40
76	2	15	645	32.511	6.5	134-40
76	2	15	1010	32.533b	0.0	135-40
76	2	15	1315	32.513	6.4	136-40
76	2	15	1705	32.510b		137-40
76	2	15	1955	32.509b		138-40
76	2	15	2300	32.565b		139-40
76	2	16	220	32.609b		140-40
76	2	16	436	32.685b		141-40
76	2	16	900	32.612b		142-40
76	2	16	1430	32.621b		143-40
76	2	17	0	32.640	5.4	ON STATION
76	2	18	0	32.683b	5.4	ON STATION
76	2	19	0	32.652	5.5	ON STATION
76	2	20	0	32.660b	5.6	ON STATION
76	2	21	0	32.660	5.4	ON STATION
76	2	22	0	32.666	5.4	ON STATION
76	2	23	0	32.687b	5.5	ON STATION
76	2	24	0	32.659	5.4	ON STATION
76	2	25	0	32.726b	5.5	ON STATION
76	2	26	0	32.670	5.2	ON STATION
76	2	27	0	32.681	5.1	ON STATION
76	2	27	2045	32.657	5.4	143-40
76	2	27	2335	32.654	5.5	142-40
76	2	28	205	32.627	5.6	141-40
76	2	28	445	32.574	5.7	140-40
76	2	28	745	32.596	5.9	139-40
76	2	28	1040	32.564	5.9	138-40
76	2	28	1330	32.514	5.8	137-40
76	2	28	1600	32.528	5.7	136-40
76	2	28	1905	32.531	6.0	135-40
76	2	28	2140	32.522	6.0	134-40
76	2	29	10	32.526	6.0	133-40
76	2	29	300	32.525	6.1	132-40
76	2	29	530	32.469	6.2	131-40
76	2	29	755	32.497	6.3	130-40

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS  
CRUISE REFERENCE NUMBER 76- 2

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DY	GMT	0/00	C	WEST
76	2	29	1045	32.195	6.3	129-40
76	2	29	1310	31.990	7.0	128-40
76	2	29	1900	31.997	7.0	128-40
76	2	29	2145	32.230b	6.3	129-40
76	3	1	45	32.458	6.3	130-40
76	3	1	345	32.506	6.2	131-40
76	3	1	615	32.655b	6.0	132-40
76	3	1	900	32.562b	6.0	133-40
76	3	1	1915	32.529b	5.7	136-40
76	3	1	2200	32.534b	5.7	137-40
76	3	2	100	32.581b	5.7	138-40
76	3	2	420	32.610b	5.7	139-40
76	3	2	715	32.599b	5.7	140-40
76	3	2	1000	32.671b	5.2	141-40
76	3	2	1315	32.653	5.1	142-40
76	3	2	1800	32.674	5.1	143-40
76	3	3	0	32.680	5.0	ON STATION
76	3	4	0	32.689	5.1	ON STATION
76	3	5	0	32.677	5.2	ON STATION
76	3	6	0	32.676	5.3	ON STATION
76	3	7	0	32.677	5.2	ON STATION
76	3	7	1850	32.683	5.2	ON STATION
76	3	8	0	32.619	5.3	ON STATION
76	3	9	0	32.669	5.2	ON STATION
76	3	10	0	32.689	5.3	ON STATION
76	3	11	0	32.712	5.2	ON STATION
76	3	12	0	32.696	5.2	ON STATION
76	3	13	0	32.697	5.2	ON STATION
76	3	14	0	32.713	5.5	ON STATION
76	3	15	0	32.688	5.3	ON STATION
76	3	16	0	32.707	5.4	ON STATION
76	3	17	0	32.658	5.0	ON STATION
76	3	18	0	32.662	5.0	ON STATION
76	3	19	0	32.708	5.0	ON STATION
76	3	20	0	32.731	5.0	ON STATION
76	3	21	0	32.696	5.0	ON STATION
76	3	22	0	32.704b	4.6	ON STATION
76	3	23	0	32.721	5.0	ON STATION
76	3	23	2215	32.743	5.0	ON STATION
76	3	24	0	32.724	5.0	ON STATION
76	3	25	0	32.741	4.9	ON STATION
76	3	26	0	32.763b	4.8	ON STATION
76	3	27	0	32.755	4.8	ON STATION
76	3	28	0	32.746	5.0	ON STATION

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS  
CRUISE REFERENCE NUMBER 76- 2

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DY	GMT	0/00	C	WEST
76	3	29	0	32.753	4.8	ON STATION
76	3	29	110	32.736	4.6	143-40
76	3	29	700	32.665	5.1	142-40
76	3	29	1500	32.652	5.2	141-40
76	3	29	1740	32.614	5.3	140-40
76	3	29	2015	32.630	5.5	139-40
76	3	29	2300	32.580	5.6	138-40
76	3	30	130	32.566	5.8	137-40
76	3	30	400	32.586	6.0	136-40
76	3	30	645	32.563	5.9	135-40
76	3	30	920	32.577	6.1	134-40
76	3	30	1200	32.571	6.0	133-40
76	3	30	1445	32.519	6.3	132-40
76	3	30	1700	32.482	6.4	131-40
76	3	30	1945	32.489	6.7	130-40
76	3	30	2320	32.462	6.5	129-40
76	3	31	205	32.402	6.7	128-40
76	3	31	205	32.419b	6.7	120-40
76	3	31	525	32.380	6.7	127-40
76	3	31	525	32.289b	6.7	127-40
76	3	31	900	31.977	7.1	126-40
76	3	31	900	31.997b	7.1	126-40
76	3	31	1135	31.806	7.3	126- 0
76	3	31	1135	31.835b	7.3	126- 0
76	3	31	1315	29.558	7.3	125-33
76	3	31	1315	29.564b	7.3	125-33

b DENOTES SALINITY SAMPLE TAKEN FROM A  
BUCKET. ALL OTHER SAMPLES TAKEN FROM  
THE SEAWATER LOOP



Oceanographic Data Obtained on Cruise P-76-3  
(CODC Reference No. 15-76-003)



Results of Hydrographic Observations  
(P-76-3)

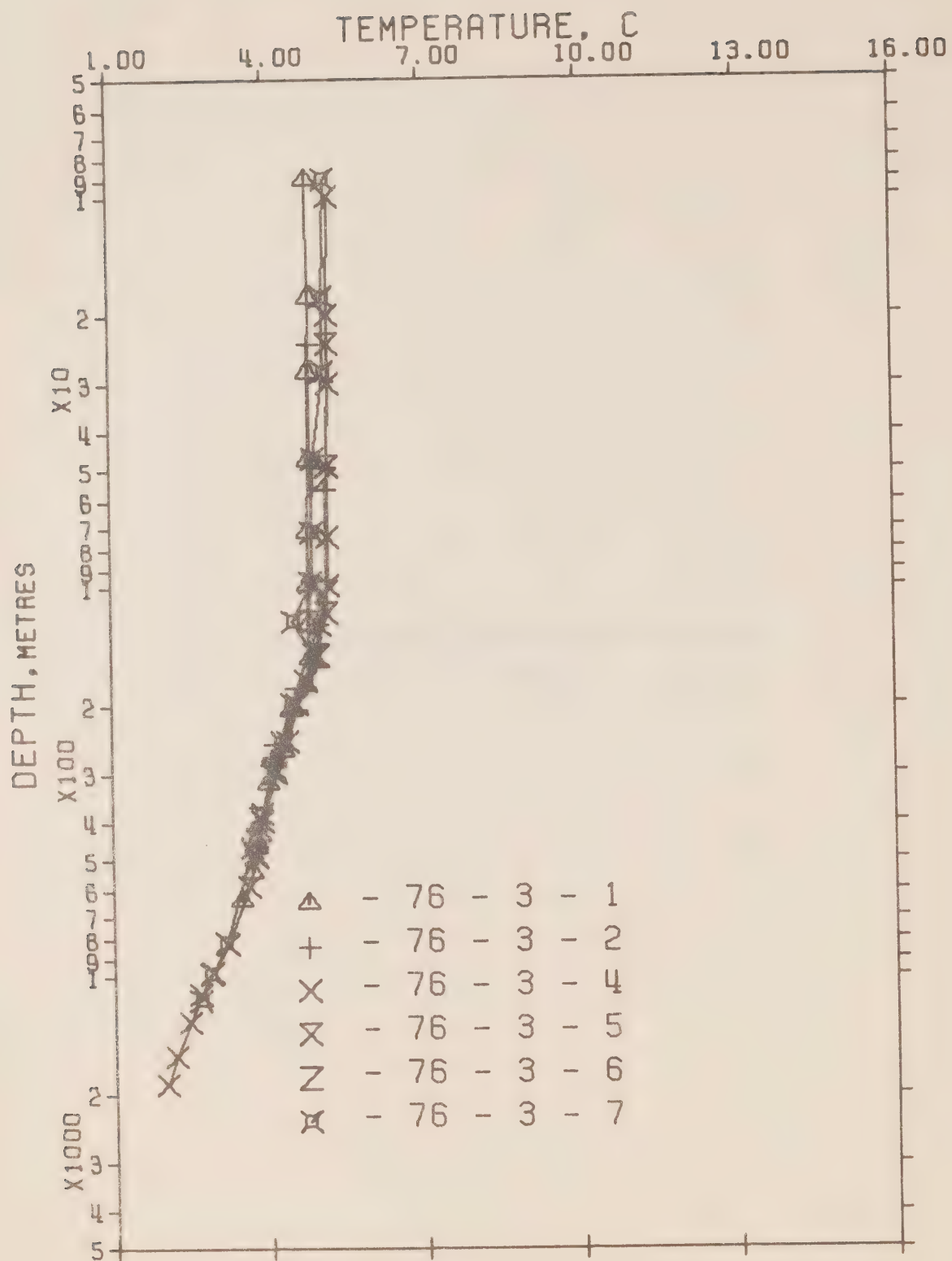


Fig. 7 Composite plot of temperature vs  $\log_{10}$  depth for Station P.  
P-76-3



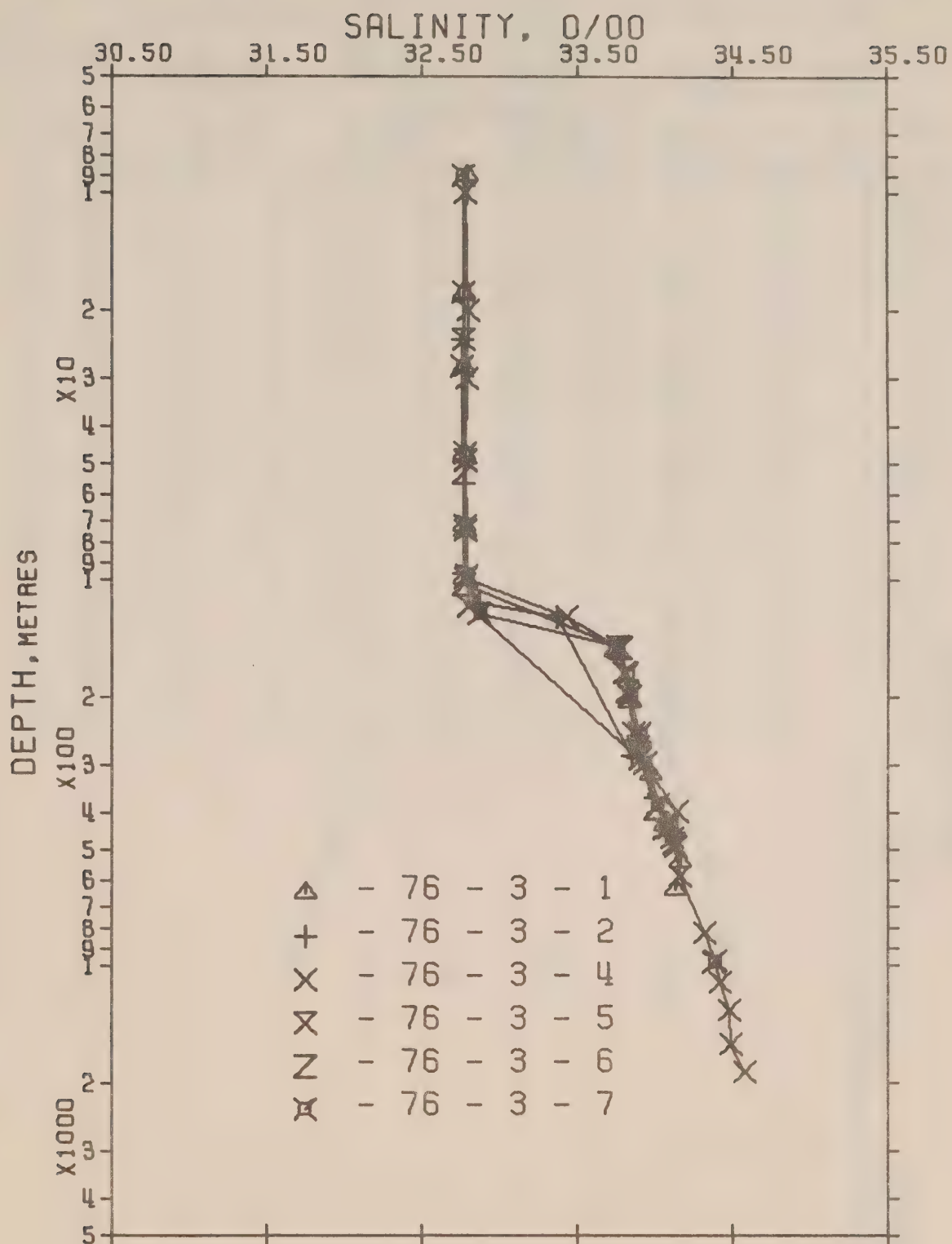
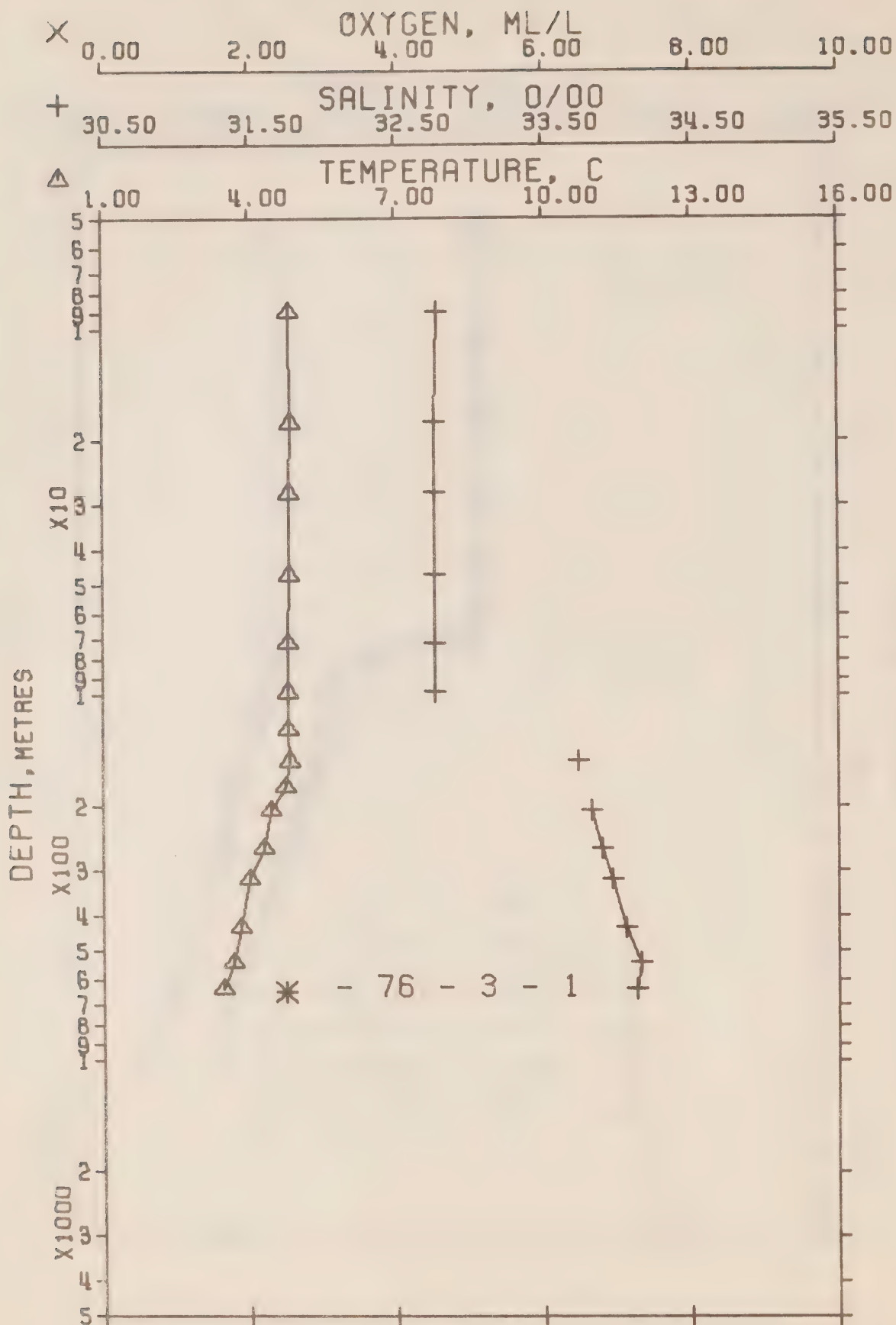


Fig. 8 Composite plot of salinity vs  $\log_{10}$  depth for Station P  
P-76-3



## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 3- 1

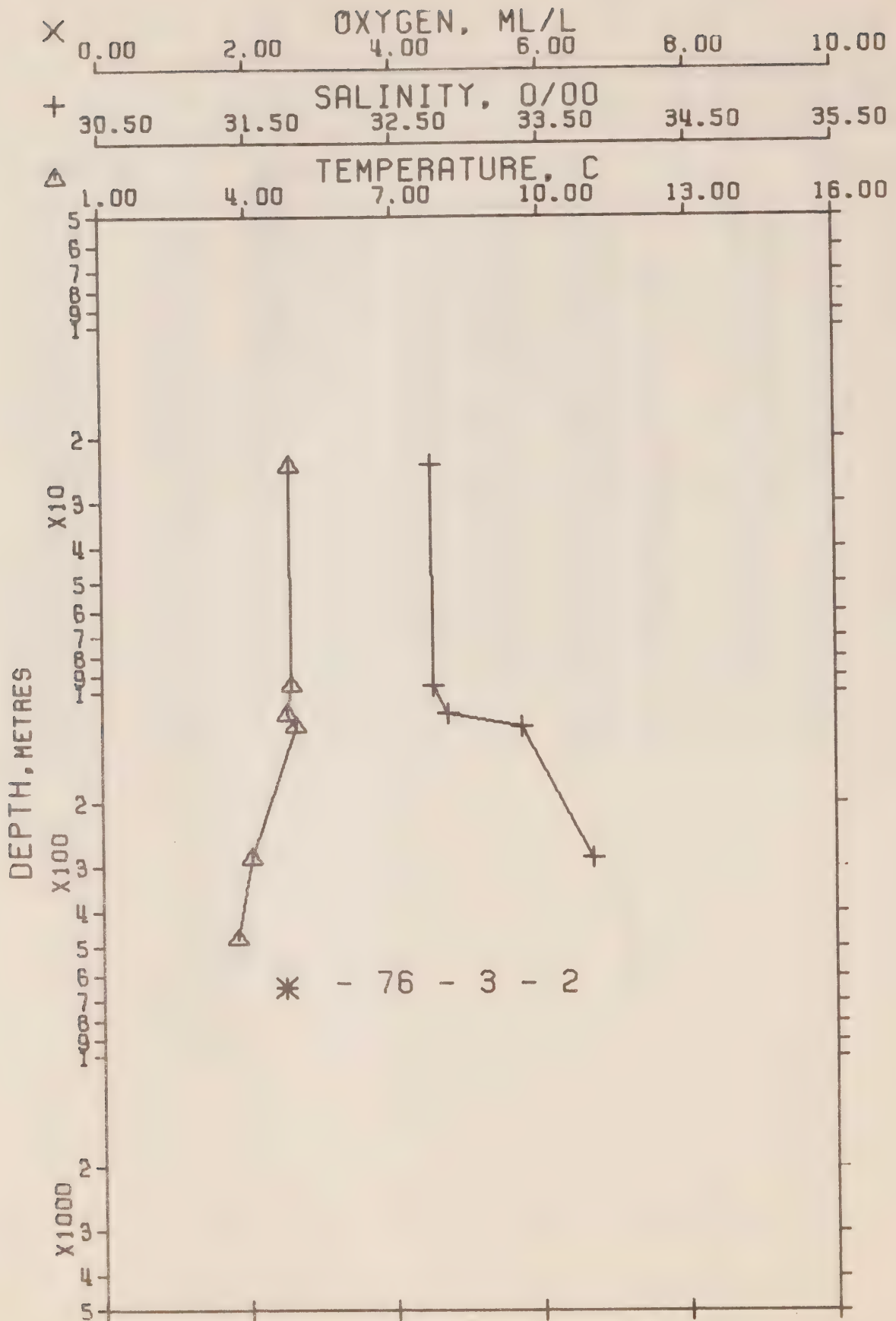
DATE 10/ 4/76 GMT 19.0

POSITION 50- 0.0 N, 145- 0.0 W

STATION P

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	4.91	32.774	0	25.948	206.8	4.91	206.6	0.0	0.0		1468.
9	4.85	32.786	9	25.964	205.4	4.85	205.1	0.19	0.01		1468.
10*	4.85	32.783	10	25.961	205.6	4.85	205.3	0.21	0.01		1468.
18	4.87	32.766	18	25.946	207.2	4.87	206.7	0.37	0.03		1468.
20*	4.86	32.766	20	25.947	207.0	4.86	206.6	0.41	0.04		1468.
28	4.83	32.767	28	25.951	206.8	4.83	206.3	0.58	0.08		1468.
30*	4.83	32.768	30	25.951	206.7	4.83	206.2	0.62	0.09		1468.
47	4.84	32.775	47	25.956	206.5	4.84	205.7	0.98	0.24		1468.
50*	4.84	32.775	50	25.956	206.5	4.83	205.7	1.03	0.26		1468.
72	4.82	32.772	72	25.956	206.7	4.81	205.7	1.50	0.55		1468.
75*	4.82	32.772	75	25.956	206.7	4.81	205.7	1.55	0.59		1469.
99	4.81	32.768	98	25.954	207.1	4.80	205.9	2.05	1.04		1469.
100*	4.81	32.798	99	25.978	204.8	4.80	203.7	2.08	1.06		1469.
125	4.80	33.298	124	26.374	167.5	4.79	166.0	2.54	1.59		1470.
150*	4.84	33.711	149	26.697	137.1	4.83	135.3	2.92	2.13		1471.
152	4.84	33.742	151	26.721	134.9	4.83	133.0	2.95	2.17		1471.
175*	4.77	33.782	174	26.761	131.4	4.76	129.2	3.25	2.67		1471.
179	4.76	33.789	178	26.767	130.8	4.75	128.6	3.30	2.77		1471.
200*	4.54	33.820	199	26.816	126.2	4.52	124.0	3.57	3.29		1471.
208	4.46	33.830	206	26.833	124.7	4.44	122.4	3.66	3.48		1471.
225*	4.40	33.854	225	26.858	122.5	4.39	120.0	3.88	3.96		1471.
250*	4.33	33.885	249	26.890	119.6	4.31	116.9	4.18	4.69		1471.
264	4.29	33.901	262	26.907	118.1	4.27	115.3	4.35	5.13		1471.
300*	4.09	33.945	299	26.963	113.1	4.07	110.0	4.76	6.32		1471.
320	3.99	33.968	318	26.992	110.5	3.97	107.3	4.99	7.05		1471.
400*	3.87	34.035	400	27.057	104.8	3.84	101.0	5.84	10.18		1472.
435	3.82	34.060	431	27.082	102.7	3.79	98.7	6.20	11.70		1472.
500*	3.72	34.125	499	27.143	97.4	3.69	92.8	6.86	14.82		1473.
542	3.67	34.162	537	27.178	94.3	3.63	89.5	7.26	16.93		1473.
600*	3.54	34.143	597	27.175	94.8	3.50	89.7	7.81	20.14		1474.
639	3.46	34.131	633	27.174	95.2	3.42	89.8	8.17	22.45		1474.





## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 3- 2

DATE 12/ 4/76

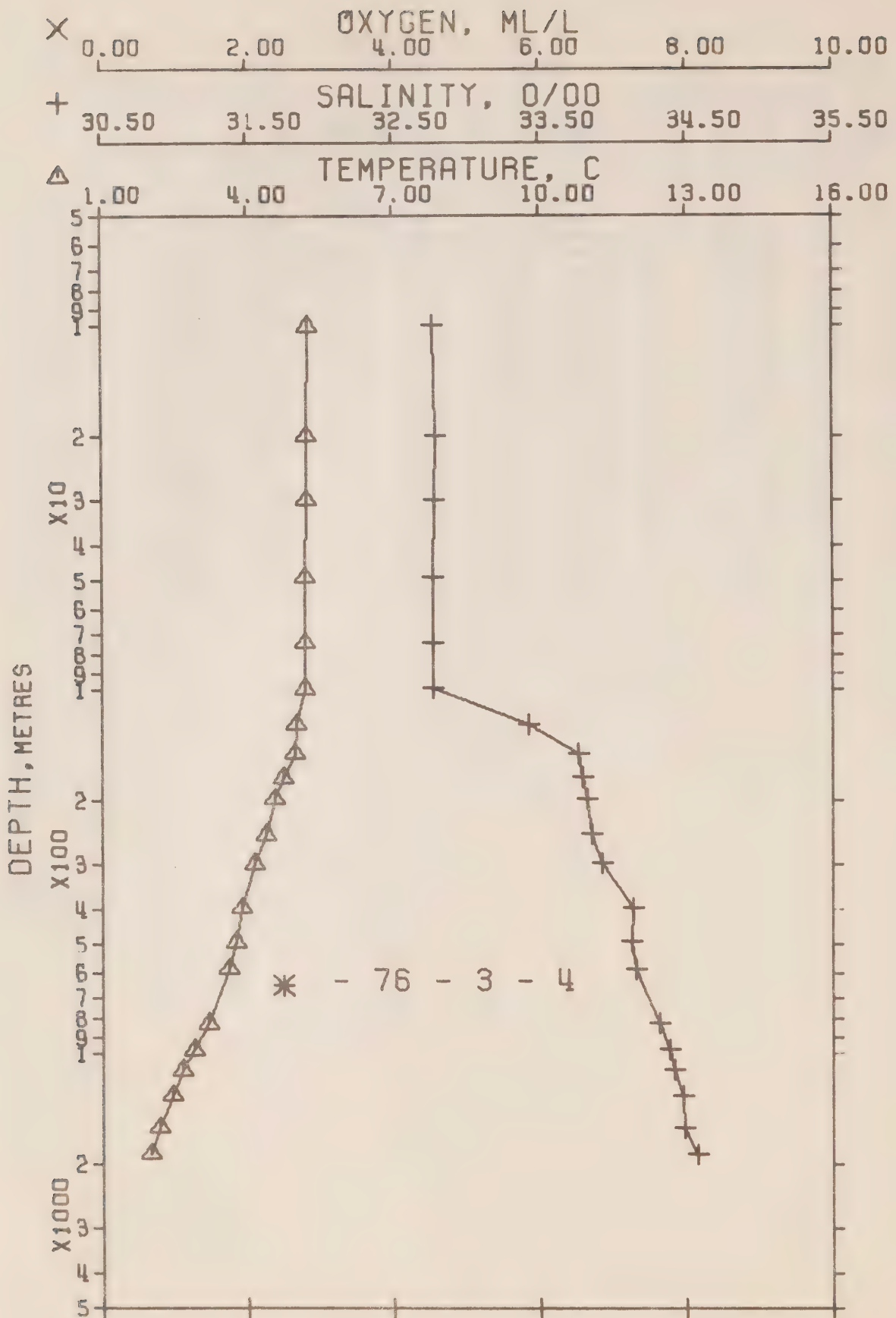
GMT 19.9

POSITION 50- 0.0 N, 145- 0.0 W

STATION P

HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	4.90	32.765	0	25.942	207.4	4.90	207.2	0.0	0.0		1468.
10*	4.89	32.764	18	25.943	207.4	4.88	207.1	0.21	0.01		1468.
20*	4.88	32.764	23	25.943	207.4	4.88	207.0	0.41	0.04		1468.
24	4.88	32.764	24	25.943	207.4	4.88	207.0	0.50	0.06		1468.
30*	4.88	32.766	35	25.944	207.4	4.88	206.9	0.62	0.10		1468.
50*	4.89	32.769	62	25.946	207.4	4.89	206.7	1.04	0.26		1468.
75*	4.90	32.772	83	25.948	207.4	4.89	206.6	1.56	0.59		1469.
97	4.90	32.774	96	25.949	207.5	4.89	206.4	2.01	0.99		1469.
100*	4.88	32.792	100	25.965	206.0	4.87	204.8	2.08	1.06		1469.
116	4.80	32.870	115	26.036	199.5	4.79	198.1	2.40	1.42		1469.
125	4.99	33.372	124	26.412	164.0	4.98	162.5	2.57	1.62		1471.
150*	4.79	33.478	159	26.518	154.1	4.77	152.3	2.95	2.16		1471.
175*	4.62	33.567	189	26.607	145.8	4.60	143.8	3.32	2.78		1470.
200*	4.47	33.644	215	26.685	138.7	4.45	136.5	3.68	3.46		1470.
225*	4.34	33.712	238	26.753	132.4	4.32	130.1	4.02	4.19		1470.
250*	4.22	33.773	258	26.813	126.8	4.20	124.3	4.34	4.97		1470.
288	4.06	33.855	286	26.895	119.3	4.04	116.5	4.81	6.26		1470.
300*	4.04	33.879	301	26.916	117.4	4.02	114.4	4.95	6.68		1470.
400*	3.87	34.052	408	27.071	103.6	3.84	99.8	6.05	10.61		1472.
481	3.76	34.163	477	27.170	94.8	3.73	90.3	6.85	14.20		1473.



## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 3- 4

DATE 22/ 4/76

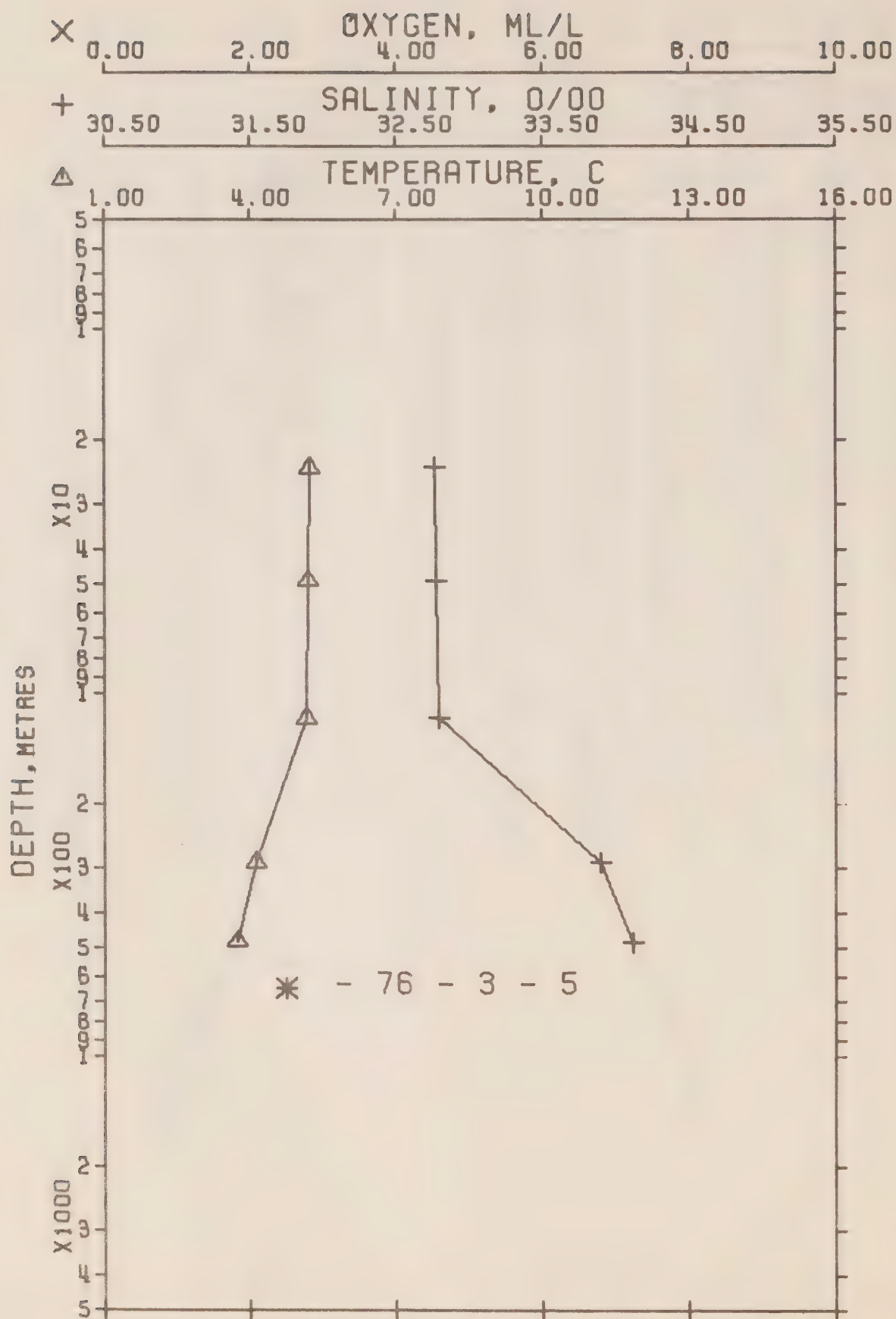
GMT 18.0

POSITION 50- 0.0' N, 145- 0.0' W

STATION P

## HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA	POT. EN	OXY	SOUND
0	5.33	32.785	0	25.909	210.5	5.33	210.3	0.0	0.0		1469.
10	5.27	32.779	10	25.911	210.4	5.27	210.1	0.21	0.01		1469.
20	5.24	32.804	20	25.934	208.2	5.24	207.8	0.42	0.04		1469.
30	5.23	32.791	30	25.925	209.2	5.23	208.7	0.63	0.10		1470.
49	5.21	32.785	49	25.923	209.7	5.21	208.9	1.03	0.26		1470.
50*	5.21	32.785	50	25.923	209.7	5.21	208.9	1.05	0.27		1470.
74	5.21	32.784	74	25.922	209.9	5.20	209.0	1.56	0.59		1470.
75*	5.21	32.784	75	25.922	209.9	5.20	209.0	1.57	0.60		1470.
100	5.20	32.785	99	25.924	210.0	5.19	208.7	2.10	1.07		1471.
125	5.02	33.431	124	26.455	159.9	5.01	158.3	2.57	1.60		1471.
150	4.98	33.771	149	26.729	134.3	4.97	132.3	2.93	2.11		1472.
175	4.76	33.801	174	26.777	129.9	4.75	127.7	3.26	2.66		1471.
200	4.58	33.833	199	26.822	125.7	4.56	123.5	3.58	3.28		1471.
225*	4.48	33.848	225	26.845	123.7	4.46	121.2	3.89	3.94		1471.
250*	4.38	33.862	248	26.866	121.9	4.36	119.2	4.19	4.68		1471.
251	4.38	33.862	249	26.867	121.9	4.36	119.2	4.20	4.71		1471.
300*	4.16	33.926	298	26.942	115.1	4.13	112.1	4.79	6.35		1471.
301	4.15	33.928	299	26.943	114.9	4.13	111.9	4.81	6.40		1471.
400	3.89	34.136	397	27.135	97.5	3.86	93.6	5.85	10.12		1472.
496	3.76	34.135	492	27.148	97.0	3.72	92.4	6.78	14.36		1473.
500*	3.75	34.136	496	27.149	96.9	3.72	92.3	6.81	14.55		1473.
588	3.60	34.156	583	27.180	94.4	3.56	89.3	7.66	19.24		1474.
600*	3.58	34.165	597	27.190	93.6	3.53	88.3	7.77	19.92		1474.
700*	3.39	34.238	704	27.266	85.8	3.34	81.1	8.67	25.89		1475.
800*	3.23	34.300	797	27.331	81.2	3.17	74.9	9.51	32.31		1476.
831	3.18	34.318	823	27.349	79.6	3.12	73.1	9.76	34.36		1476.
900*	3.04	34.351	895	27.389	76.0	2.98	69.3	10.30	39.11		1477.
980	2.89	34.387	971	27.431	72.3	2.82	65.3	10.89	44.82		1477.
1000*	2.86	34.392	991	27.437	71.7	2.79	64.7	11.03	46.24		1478.
1120	2.66	34.418	1109	27.476	68.3	2.58	61.0	11.88	55.34		1479.
1200*	2.57	34.446	1191	27.506	65.7	2.49	59.1	12.41	61.66		1480.
1314	2.45	34.494	1300	27.546	62.2	2.36	54.2	13.14	70.96		1481.
1500*	2.26	34.486	1490	27.563	60.8	2.16	52.6	14.28	87.30		1483.
1613	2.16	34.487	1595	27.573	60.1	2.05	51.6	14.96	98.17		1485.
1706	1.99	34.576	1883	27.657	52.9	1.86	43.5	16.63	127.94		1489.





## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 3- 5

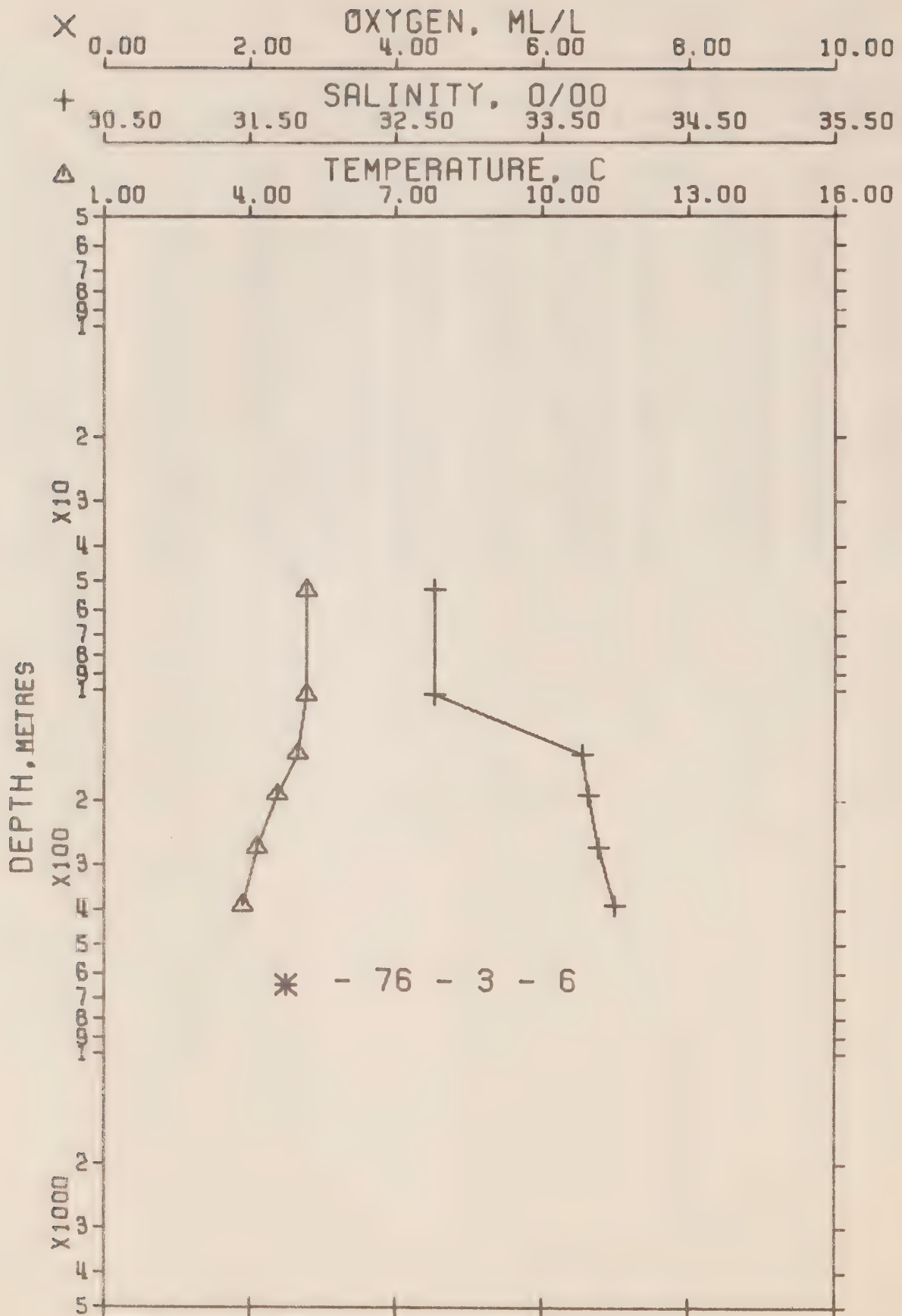
DATE 27/ 4/76 GMT 18.8

POSITION 50- 0.0 N. 145- 0.0 W

STATION P

## HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	5.34	32.769	0	25.895	211.8	5.34	211.5	0.0	0.0		1469.
10*	5.26	32.768	18	25.904	211.0	5.26	210.7	0.21	0.01		1469.
20*	5.24	32.768	23	25.906	211.0	5.23	210.5	0.42	0.04		1469.
24	5.23	32.768	24	25.907	210.9	5.23	210.5	0.51	0.06		1469.
30*	5.22	32.773	32	25.912	210.5	5.22	209.9	0.63	0.10		1469.
49	5.19	32.784	49	25.924	209.5	5.19	208.8	1.04	0.26		1470.
50*	5.19	32.784	50	25.924	209.5	5.19	208.7	1.05	0.27		1470.
75*	5.18	32.790	82	25.930	209.2	5.17	208.2	1.58	0.60		1470.
100*	5.17	32.795	104	25.934	209.0	5.17	207.7	2.10	1.07		1470.
118	5.17	32.797	117	25.937	209.0	5.16	207.6	2.47	1.48		1471.
125*	5.10	32.869	128	26.001	202.9	5.09	201.4	2.62	1.67		1471.
150*	4.89	33.089	163	26.199	184.3	4.88	182.6	3.10	2.34		1470.
175*	4.71	33.276	192	26.366	168.6	4.70	166.7	3.55	3.07		1470.
200*	4.56	33.437	218	26.511	155.1	4.54	153.0	3.95	3.85		1470.
225*	4.42	33.580	240	26.639	143.1	4.40	140.7	4.32	4.65		1470.
250*	4.30	33.708	261	26.753	132.5	4.28	129.9	4.67	5.49		1470.
293	4.11	33.901	291	26.926	116.4	4.09	113.5	5.20	6.96		1471.
300*	4.09	33.911	300	26.936	115.6	4.07	112.6	5.28	7.20		1471.
400*	3.87	34.035	408	27.057	104.8	3.84	101.0	6.37	11.11		1472.
485	3.72	34.118	481	27.138	97.7	3.69	93.3	7.23	14.98		1472.



## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 3- 6

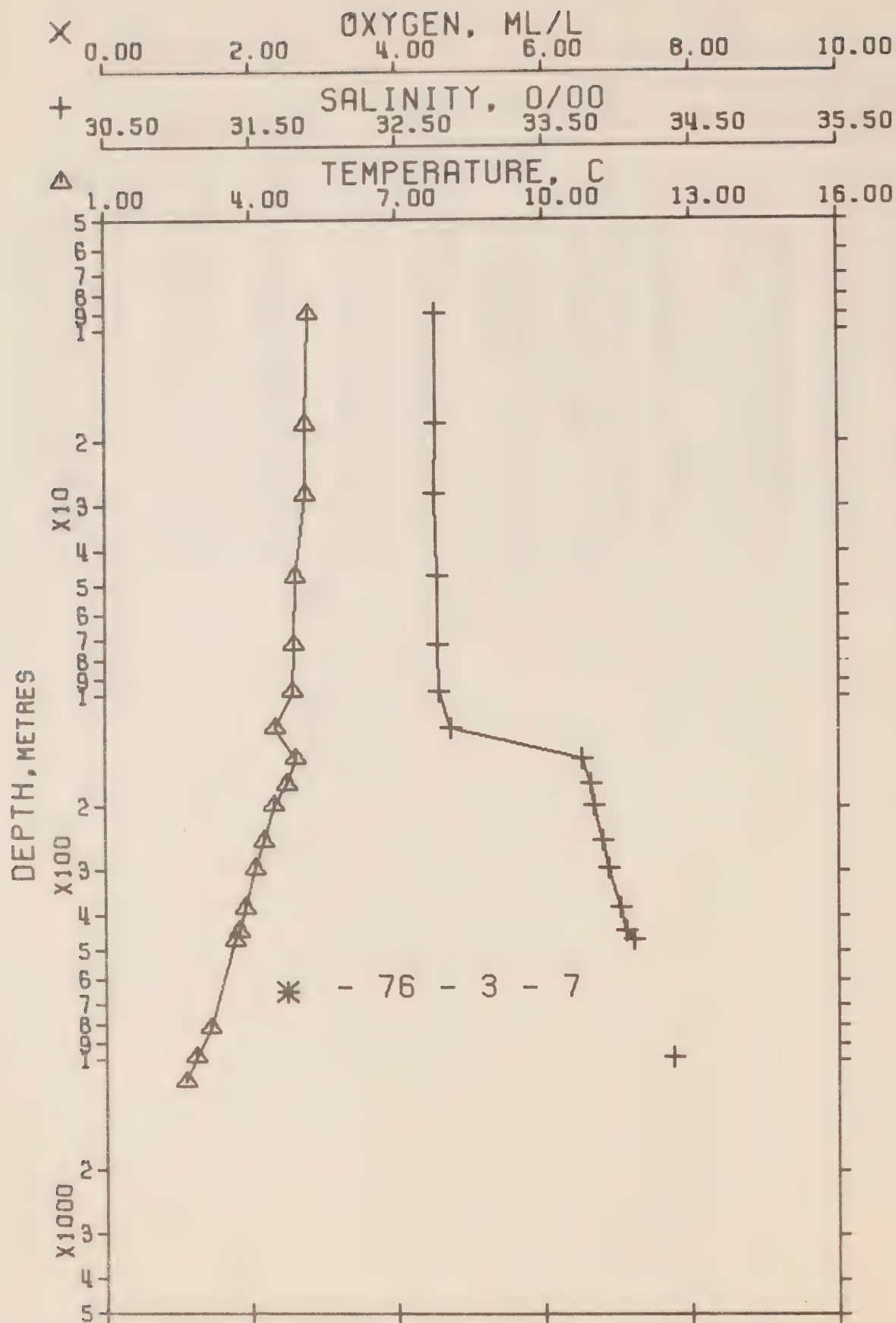
DATE 27/ 4/76 GMT 23.5

POSITION 50- 0.0 N, 145- 0.0 W

STATION P

## HYDROGRAPHIC CAST DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SCUND
0	5.47	32.775	0	25.885	212.8	5.47	212.5	0.0	0.0		1470.
10*	5.30	32.773	32	25.904	211.1	5.30	210.8	0.21	0.01		1469.
20*	5.25	32.773	40	25.909	210.7	5.25	210.3	0.42	0.04		1469.
30*	5.22	32.772	46	25.912	210.5	5.22	210.0	0.63	0.10		1469.
50*	5.18	32.772	52	25.915	210.3	5.18	209.6	1.05	0.27		1470.
53	5.18	32.772	53	25.916	210.4	5.18	209.5	1.12	0.31		1470.
75*	5.17	32.774	79	25.918	210.4	5.17	209.4	1.58	0.60		1470.
100*	5.17	32.775	100	25.919	210.4	5.16	209.2	2.11	1.07		1470.
104	5.17	32.775	103	25.919	210.5	5.16	209.2	2.18	1.15		1470.
125*	5.07	33.282	126	26.331	171.6	5.06	170.1	2.60	1.64		1471.
150	4.98	33.778	149	26.734	133.7	4.97	131.8	2.97	2.16		1472.
175*	4.74	33.804	175	26.782	129.4	4.73	127.2	3.30	2.70		1471.
194	4.58	33.822	193	26.814	126.4	4.57	124.3	3.55	3.16		1471.
200*	4.54	33.827	200	26.822	125.8	4.53	123.5	3.62	3.31		1471.
225*	4.40	33.850	227	26.856	122.7	4.38	120.2	3.93	3.98		1471.
250*	4.26	33.870	251	26.886	120.0	4.24	117.4	4.23	4.71		1471.
273	4.15	33.887	271	26.911	117.7	4.13	115.0	4.50	5.44		1470.
300*	4.07	33.917	302	26.942	114.9	4.05	112.0	4.82	6.36		1471.
394	3.85	34.003	391	27.034	107.0	3.82	103.3	5.86	10.04		1471.





## OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 76- 3- 7 DATE 28/ 4/76 GMT 18.2

POSITION 50- 0.0 N, 145- 0.0 W

HYDROGRAPHIC CAST DATA

STATION P

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA D	POT. EN	OXY	SOUND
0	5.22	32.909	0	26.020	200.0	5.22	199.8	0.0	0.0		1469.
9	5.20	32.769	9	25.911	210.4	5.20	210.1	0.19	0.01		1469.
10*	5.19	32.769	10	25.912	210.2	5.19	209.9	0.21	0.01		1469.
18	5.15	32.772	18	25.919	209.7	5.15	209.3	0.38	0.04		1469.
20*	5.15	32.770	20	25.918	209.9	5.15	209.4	0.42	0.04		1469.
28	5.15	32.765	28	25.914	210.3	5.15	209.8	0.59	0.09		1469.
30*	5.12	32.767	30	25.918	209.9	5.12	209.4	0.63	0.10		1469.
47	4.93	32.782	47	25.952	206.8	4.93	206.2	0.99	0.24		1469.
50*	4.93	32.782	50	25.952	206.9	4.92	206.1	1.04	0.27		1469.
72	4.91	32.785	72	25.956	206.6	4.90	205.7	1.51	0.56		1469.
75*	4.91	32.786	75	25.957	206.5	4.90	205.7	1.56	0.60		1469.
98	4.88	32.792	97	25.965	206.0	4.87	204.8	2.03	1.01		1469.
100*	4.84	32.800	100	25.976	205.0	4.84	203.8	2.08	1.06		1469.
123	4.52	32.874	122	26.069	196.3	4.51	195.0	2.55	1.59		1468.
125*	4.56	32.955	124	26.129	190.6	4.55	189.3	2.59	1.65		1468.
149	4.92	33.763	148	26.729	134.2	4.91	132.3	2.96	2.17		1471.
150*	4.91	33.765	149	26.732	133.9	4.90	132.0	2.98	2.19		1471.
175	4.76	33.824	174	26.795	128.1	4.75	126.0	3.31	2.73		1471.
200	4.48	33.843	199	26.841	123.9	4.47	121.6	3.62	3.34		1471.
225*	4.37	33.873	225	26.877	120.7	4.36	118.2	3.92	3.99		1471.
250*	4.27	33.901	248	26.909	117.8	4.25	115.1	4.22	4.71		1471.
251	4.27	33.902	249	26.910	117.7	4.25	115.0	4.23	4.74		1471.
299	4.10	33.938	297	26.957	113.7	4.08	110.6	4.79	6.31		1471.
300*	4.10	33.939	298	26.957	113.6	4.08	110.5	4.80	6.34		1471.
384	3.87	34.016	381	27.042	106.1	3.84	102.5	5.72	9.54		1471.
400*	3.84	34.030	398	27.056	104.9	3.81	101.1	5.89	10.22		1471.
444	3.76	34.064	440	27.091	101.8	3.73	97.8	6.34	12.16		1472.
469	3.67	34.107	465	27.134	97.9	3.64	93.7	6.59	13.33		1472.
500*	3.61	34.131	505	27.159	95.7	3.58	91.4	6.89	14.82		1472.
600*	3.44	34.198	618	27.229	89.7	3.40	84.7	7.82	20.01		1473.
700*	3.30	34.255	714	27.288	84.6	3.25	79.0	8.69	25.78		1474.
800*	3.17	34.304	797	27.339	80.4	3.12	74.1	9.51	32.08		1475.
819	3.15	34.313	811	27.348	79.6	3.09	73.3	9.66	33.30		1475.
900*	3.00	34.347	895	27.389	75.9	2.94	68.3	10.30	38.85		1475.
986	2.86	34.381	976	27.429	72.5	2.79	65.5	10.93	44.55		1477.
1000*	2.84	34.386	991	27.435	71.9	2.77	65.0	11.04	46.01		1477.
1153	2.66	34.439	1141	27.493	67.0	2.58	59.4	12.09	57.60		1479.



Surface Salinity and Temperature Observations  
(P-76-3)





SURFACE SALINITY AND TEMPERATURE OBSERVATIONS  
CRUISE REFERENCE NUMBER 76- 3

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DY	GMT	0/00	C	WEST
76	3	27	1615	32.404	6.9	128-40
76	3	27	2327	32.507		130-40
76	3	28	545	32.546		132-40
76	3	28	927	32.570	6.3	133-40
76	3	28	1232	32.588	5.9	134-40
76	3	28	1550	32.571	5.9	135-40
76	3	28	1920	32.590	6.0	136-40
76	3	28	2237	32.561	5.9	137-40
76	3	29	56	32.563	5.7	138-40
76	3	29	501	32.609	5.6	139-40
76	3	29	811	32.610	5.6	140-40
76	3	30	0	32.770	5.0	ON STATION
76	4	1	0	32.764	5.0	ON STATION
76	4	2	0	32.790	4.9	ON STATION
76	4	3	0	32.755	4.8	ON STATION
76	4	4	0	32.769	4.9	ON STATION
76	4	5	0	32.770	5.0	ON STATION
76	4	6	0	32.790	5.0	ON STATION
76	4	7	0	32.755	5.2	ON STATION
76	4	8	0	32.770	5.4	ON STATION
76	4	9	0	32.763	5.0	ON STATION
76	4	10	0	32.761	5.1	ON STATION
76	4	11	0	32.755	5.2	ON STATION
76	4	12	0	32.773	5.1	ON STATION
76	4	13	0	32.757	5.1	ON STATION
76	4	14	0	32.767	5.1	ON STATION
76	4	15	0	32.786	5.1	ON STATION
76	4	16	0	32.788	5.1	ON STATION
76	4	17	0	32.764	5.3	ON STATION
76	4	18	0	32.769	5.2	ON STATION
76	4	19	0	32.768	5.2	ON STATION
76	4	20	0	32.794	5.2	ON STATION
76	4	21	0	32.779	5.2	ON STATION
76	4	22	0	32.673	5.3	ON STATION
76	4	23	45	32.817	5.4	ON STATION
76	4	24	0	32.780	5.0	ON STATION
76	4	25	0	32.783	5.3	ON STATION
76	4	26	0	32.788	5.3	ON STATION
76	4	27	0	32.774	5.3	ON STATION
76	4	28	0	32.770	5.4	ON STATION
76	4	29	0	32.766	5.4	ON STATION
76	4	30	0	32.770	5.4	ON STATION
76	5	1	0	32.771	5.5	ON STATION
76	5	2	0	32.762	5.6	ON STATION

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS  
 CRUISE REFERENCE NUMBER 76- 3

DATE/TIME				SALINITY	TEMP	LONGITUDE
YR	MO	DAY	GMT	0/00	C	WEST
76	5	3	0	32.757	5.5	ON STATION
76	5	4	0	32.833	5.6	ON STATION
76	5	5	0	32.816	5.6	ON STATION
76	5	6	0	32.810	5.8	ON STATION
76	5	7	0	32.784	5.7	ON STATION
76	5	8	0	32.833	5.7	ON STATION
76	5	9	0	32.770	5.7	ON STATION
76	5	10	645	32.764	5.6	142-40
76	5	10	1845	32.556	6.5	138-40
76	5	10	2350	32.545	7.1	136-40
76	5	11	615	32.543	7.2	134-40
76	5	11	1135	32.533	7.5	132-40
76	5	11	1800	32.472	8.5	130-40
76	5	12	45	32.183	8.5	128-40
76	5	12	405	32.072	9.0	127-40
76	5	12	715	32.186	9.7	126-40
76	5	12	1015	31.261	10.7	126- 0















